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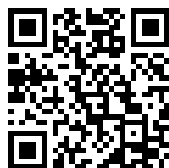
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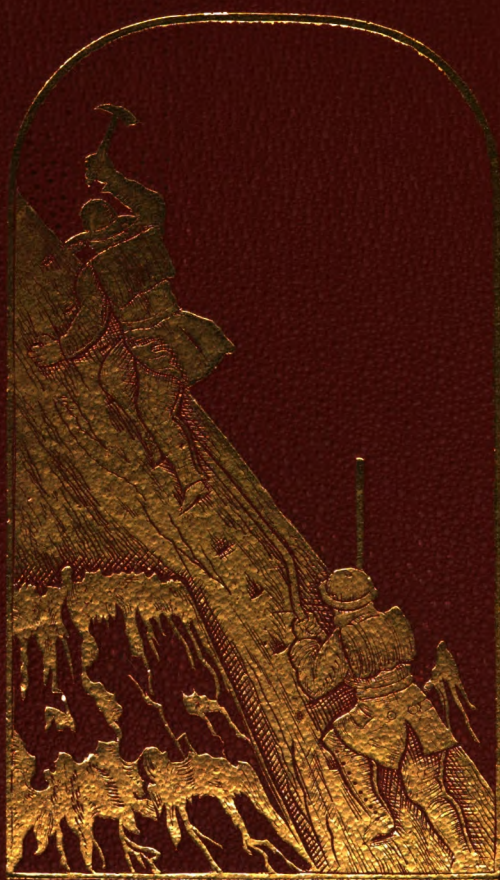
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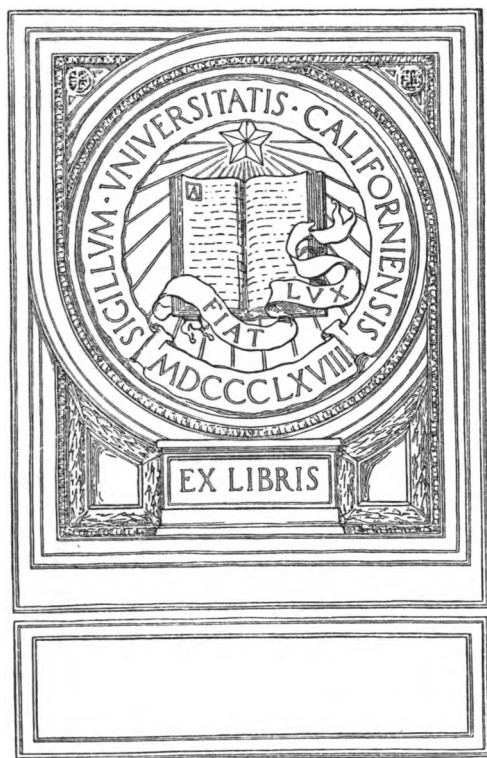
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THE ALPINE JOURNAL

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View of Lac de Chute et du Mont Blanc

Reproduction of an old print from the collection of R. W. Lloyd illustrating his paper on the 'Lac de Chute et du Mont Blanc'.

THE ALPINE JOURNAL

MAY 1927.

(No. 234.)

THE ASCENT OF MT. LOGAN.

By A. H. MACCARTHY.

(Read before the Alpine Club, November 2, 1926.)

STIMULATED by the valiant fight being made to gain the summit of Mt. Everest, the highest point on this globe of ours, the Alpine Club of Canada in 1923 again took up consideration of an attempt to climb Mt. Logan, Canada's highest peak,¹ which, after the successful ascent of Mt. Robson in 1913, Mr. Wheeler, Director of the Alpine Club of Canada, had declared to be the proper goal for the club's next efforts. A year previously the American Alpine Club had brought up the subject, and intimated that, although recognizing the Canadian club's paramount interest in Logan, in the event that that club was unable to launch a campaign against it, the American club would undertake the task, or, better still, would be glad to engage in a joint expedition under the management of the two clubs, and this suggestion naturally spurred the Canadian Alpine Club on to definite action in the matter; and at its annual meeting, at the 1923 encampment, the first step was taken by the appointment of the Mt. Logan Executive Committee, with instructions to investigate the feasibility of such an attempt, and with full powers to act in case a favourable decision was reached.

The first official meeting of that Committee was held at Vancouver on November 14, 1923, at which time Colonel

¹ See map, *A.J.* 37, 90.

Foster, D.S.O., was made chairman, Mr. A. O. Wheeler, director, and the writer was informed that he had been chosen as leader of the expedition—thus putting into effect the results of a conspiracy hatched at an informal meeting held before I arrived on the scene. Thrown off my guard by the flattery of such a designation, and without knowing in the slightest what I was letting myself in for, I accepted the appointment and asked for instructions, for up to this time I simply knew Logan was the second highest peak on the North American Continent and was located somewhere in Canada.

Then it was that the magnitude of the project became apparent to all of us, for an inspection of the maps and photographs and a reading of the report of the International Boundary Survey covering the mountainous area in which Logan is situated clearly indicated that our job was a big one, for Mt. Logan has many geographical and alpine features that require the most careful study and consideration in order to cope with the difficulty each of them contributes to hamper an approach to it and a climb of its forbidding heights.

A few of these controlling factors are as follows :

1. Located in the S.W. corner of Yukon territory, 156 miles from rail-head and the nearest habitation, with intervening territory of the most difficult character to traverse.

2. Being at 60° 35' N. lat. and thus almost within the Arctic circle with its consequent severe temperatures.

3. An altitude above sea-level of 19,850 ft., and standing 14,000 ft. above the level of its surrounding glaciers.

4. The stupendous bulk of its massif, having a circumference at its base of over 100 miles, while at its 10,000 ft. level it measures 16 miles from E. to W. and 8 miles from N. to S.

5. Superimposed on this higher plateau is a regular system of peaks, snow-fields, and glaciers, indicated but not detailed in any picture or map.

6. An ice-cap of almost 200 square miles area, the centre of the greatest glaciated alpine area known, and the source of scores of cliff and hanging glacier encircling it which form the sources of some of the world's largest glaciers : the Logan, 50 to 60 miles long and from 3 to 5 miles wide ; the Seward, the longest alpine glacier known ; and the huge Columbus Glacier, which fills in the bleak area between the Logan massif and the St. Elias Range to the S.W.

7. Eleven miles of badly broken and crevassed snow and ice stretches across the high plateau from the most favourable point of attack on the massif to the base of the final peak.

8. The close proximity of the Pacific Coast with its moisture-laden airs over the Japan current, causing enormous precipitation on the high levels and frequent and many times long sustained storms of the greatest intensity.

Such serious factors as these entering into our problem, it was essential that a reconnaissance should be made in order to obtain reliable data on which a plan of campaign could be based before an expedition should be sent out, for up to this time the highest point reached on the massif was made by a survey party in establishing Station 'Turn' at 6500 ft. elevation and about 16 miles from the summit, and little was known as to actual condition from a climbing point of view.

Of the three possible lines of approach to Logan, from the E. by way of Skazway, White House, and Kluane Lake, from the S. from the shore of Yakutat Bay, and from the N.W. by way of the Chitina Valley from the little town of McCarthy, the latter was the only definitely known route, and it also delivered at the N.W. point of the massif, which, according to the maps and all the pictures of the mountain, afforded the best and apparently the only feasible line of ascent of the massif to the upper plateau. Hence it was decided that in the summer of 1924 I should undertake a reconnaissance over the McCarthy-Chitina approach and obtain the data on which to base an assault in 1925. With no provision made in advance for this trip, it was necessary for my two local men, Andrew Taylor and Miles Atkinson, and me to relay back-pack our entire outfit from the end of the 86-mile horse trail from McCarthy to the beginning of ice, across the Chitina and Walsh Glaciers and up the Logan and Ogilvie Glacier, each mile of which had to be traversed eight times in our relays, which involved a tramp of 552 miles—315 miles of which were done with packs averaging 60 lbs. each, and the climbing of intervening ridges and hills totalling over thirteen times the height of Logan above sea-level. This was a severe, exhaustive ordeal that, combined with almost constant bad weather while near and on the mountain, made a serious attempt to climb it impossible, and limited our advance over the route chosen up the King Peak Trench to a maximum elevation of 10,200 ft. But our experiences of this 45-day trip definitely proved that the McCarthy-Chitina route was feasible and should be adopted, and much valuable data was obtained on which to formulate plans for the 1925 campaign. This western route involved the following stages: Steamer trip, Seattle to Cordova, Alaska, 1600 miles, 5 days; railroad, Cordova to McCarthy, 191 miles,

2 days; pack train up Chitina Valley from McCarthy to beginning of ice at Chitina Glacier, 86 miles, 6 days; trekking up Chitina, Walsh, Logan, and Ogilvie Glaciers to advance base camp site at base of massif, 52 miles, 5 days; and, finally, from this point at the base of the King Glacier Cascades the advance and climb was to be undertaken up the King Peak Trench to the upper plateau of the massif, and then a traverse of the plateau to the highest summit at its eastern end, a distance of 18 miles with a rise of 12,000 ft., and my estimated time for accomplishing this stretch was twenty-one days, if possible making it from June 1 to June 21, when continuous daylight would be at its best.

These, then, were the elements that entered into our problem and had to be solved with one most important factor to remain an unknown quantity until after the event, but to be carefully reckoned with at all hazards—that factor being the weather.

The gruelling ordeal of relay back-packing definitely convinced me that it must be entirely eliminated on the line of approach in 1925, so that the climbing party might reach the advance base camp in prime condition. Hence the entire outfit of clothing, equipment, fuel, and provisions to be used beyond the end of the horse-trail must be freighted in during the winter when dog-teams could be used to advantage, 4700 lbs. required for use on the massif to be laid down as near as possible to the advance base camp site, while five other lots of food and fuel must be cached along the line of advance up the glaciers for use of the party while going in and returning from the mountain. In addition to these caches, it was necessary to place five caches of hay and grain, 2200 lbs. total, along the valley trail for the use of the pack train in May, when grass would not yet be available for the horses.

Thus the Logan campaign consisted of two operations, that of freighting in and laying down these caches, and then the assault by the climbing party, the first extending from February 4 to April 26, and the second from May 12 to July 15, and it would be difficult for me to say which period proved to be the greater ordeal.

With so much time and expense involved in merely getting the party to the base of the mountain, it was evident that our arrangements should be made to cover a reasonably long period of time in order to be prepared to tide over spells of bad weather, and that our party should be sufficiently large to provide for several casualties and still leave a strong party for the final climb. Accordingly, provision was made for a party of ten for



Phot. A. H. MacCarthy.

ROUGH GOING.



Phot. A. H. MacCarthy.

THE START FROM MacCARTHY
ON THE SEVENTY DAYS' JOURNEY.



Phot. A. H. MacCarthy.

OVER THE ROUGH NORTH SHORE LINE.



Phot. A. H. MacCarthy.

ELAINE CAMP.

a campaign of three months from rail-head—one month to go in to the advance base camp and to return from it, and two months around and on the mountain.

The outfit equipment, supplies, fuel, and provisions based on these figures and assembled in January 1925 at McCarthy to be freighted to the various points along the trail and glacier stretches totalled 6724 lbs., while the hay and grain necessary for the pack-train brought this total up to 8924 lbs. to be placed in ten caches along the route, with the greater part, 4700 lbs., to go clear through to the head of Ogilvie Glacier, 138 miles from McCarthy—a task that must be completed before the climbing party could with safety begin its advance for the assault.

With little overflow ice on the rivers to help us, much soft snow on the dry gravel bars, and temperatures dropping to 55° below zero F., and such a large cargo to transport, it was clearly evident that the two dog-teams originally provided for could not accomplish the work in the time available, and therefore a third dog-team and six horses with two bob-sleds and three more men were added to our train, with the consequence that our supply of provisions and feed had to be greatly increased—50 lbs. of hay and grain per day for each horse, and about 3 lbs. a day of rice and tallow or corn meal, fish, and lard for each dog, while the requirements for the men averaged about 4 lbs. each per day; thus our total cargo ran up to 19,860 lbs., almost exactly 1 lb. per ft. of altitude of Logan above sea-level.

In order that our entire caravan might make a definite and complete departure from civilization at the same time, which is a very difficult although very necessary thing when doing real work in the Northland, 2½ tons of the outfit were relayed up the Chitina Valley (50 miles) during the period from February 4 to 13 by Taylor and Trim, the teamster, when a minimum temperature of 52° below zero was recorded on one day.

On February 17 our start from McCarthy was made with six horses, twenty-one dogs, and six men, and a short distance down the Kennecott River our troubles and hard work began, for it seemed that we had struck the usual 'unusual year,' when all conditions seemed to be very much against us and we were in for an uphill fight; but we were thankful at the end of the first day to find ourselves at the junction of the Nizina with the Chitina River, 16 miles from McCarthy, and safely through the treacherous Nizina gorge without accident. This winter route,

down the Kennebecott and Nizina and up the Chitina to its source and the forefoot of the Chitina Glacier, is a little over 100 miles in length, and throughout most of that distance, from February 17 to March 5, it was a constant fight against adverse conditions, and often very discouraging when open channels would force us to retrace long stretches and thus make our advance for the day pitifully small. Fortunately, however, during this period we had no terribly severe storms and our animals, somewhat sheltered in the woods at night, fared fairly well, although the temperature generally dropped before morning to from 30° to 35° below zero, and the heavy harnesses became so stiff that they were not taken off for thirteen days.

Reaching the forefoot of the Chitina Glacier with the dog-teams and one double bob-sled load on February 27, it became necessary for us to choose between the N. shore and the S. shore line-up, the first 25 miles of the glacier stretch, a decision that might spell success or defeat for all our hard work. From the bare condition of much of the moraine and the extremely rough glacier stretches along the N. shore line, it was evident that it would prove an almost hopeless task to transport our heavy cargo over that route; while, on the other hand, long stretches of the S. shore line were unknown, for a survey party in 1913 had met with considerable disaster and were forced to abandon that route after ascending it for but a very short distance.

On February 28, with Atkinson, I inspected the portal and a short distance up this route and then left 'Scotty' to follow it to the head of the gorge while I broke trail down the ice channel of the Chitina and left signals to deflect our teams to the S. shore. Upon returning late that night to our camp at Hubricks, an old prospector's camp, Atkinson reported having made the S. shore line to Baldwin Glacier and that it would go for the dog-teams, provided the ice bridges and side ledges did not give out before we could get our outfit across them. We really had no choice in the matter: the N. line was hopeless and we simply *had* to make the S. route or fail in laying down our caches and thus delay the expedition another year, and this we knew must not happen; so I decided to risk the S. shore route and gave it what proved to be a surprisingly appropriate name, that of the 'Gorge of Fate.'

With all speed possible we then, by relays with horses and dogs, got all our outfit save our bare camp requirements about 4 miles up the gorge above the portal by March 5 and, with logs taken in for the purpose, built a bridge to span the stream where an ice-bridge had gone out. On the 6th, Trim and



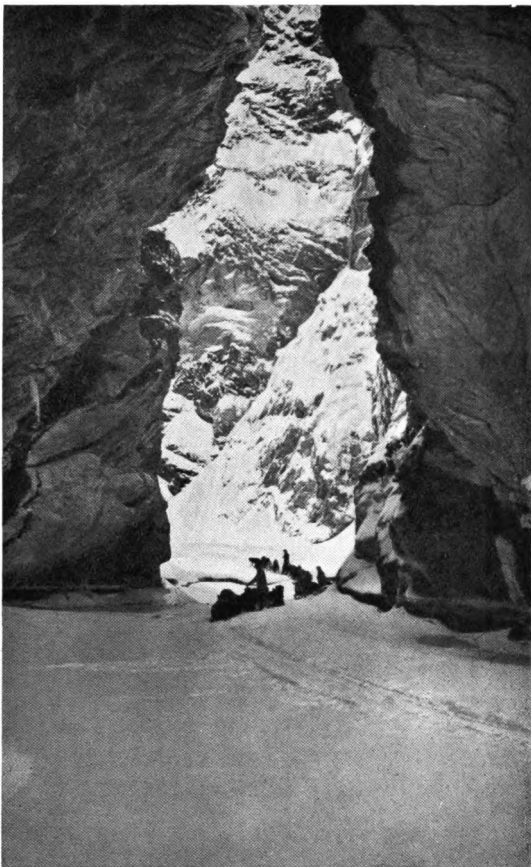
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THE SHOULDERS OF MOUNT LOGAN.



Phot. A. H. MacCarthy.

"GINGER" HEADING FOR HOME.



Phot. A. H. MacCarthy.

GRANITE PORTAL.

Weyers left with the teams and bobs for McCarthy, while Taylor, Atkinson, Olsen, and I set out with our three dog-teams and camp outfit to go clear through the gorge and establish camp above its last point of danger ; for its narrow winding course had many treacherous spots that, with the opening of the channel, the dropping of an ice-bridge here, the breaking-off of a side-ledge there, a snow avalanche from the shore cliffs, or of ice from the glacier cliffs, easily could close the way for us and force a retreat and a possible complete abandonment of our outfit.

Our great concern now was first to get the outfit across the log-bridge before its abutments were scoured out, and then to advance everything to a safe distance above the last narrow point of the gorge where the vertical walls were but 10 ft. apart and where the ice-bridge over the rushing stream was absolutely essential to our advance. Just above the gorge at this point were huge séracs and one of them appeared strikingly like a hooded sentinel, so we named this particular spot the 'Devil's Door.' Once beyond this Door with our outfit we could feel safe, for then we could rely upon alternative routes in case our first choice failed us.

At about $6\frac{1}{2}$ miles above the Portal, the gorge opened out on the shore side, and here late in the afternoon we pitched our little tent and rigged Gorge Camp, which served as our base of operations during nine very frigid, strenuous days. Throughout much of that night we had a most violent storm with heavy snowfall, and some time, probably early in the night, there occurred what we most feared, an avalanche of perhaps a thousand tons of ice falling just below the Devil's Door and effectually damming up the channel, which speedily formed a lake with 10 ft. of water, closing the Door we had passed through the afternoon before. Here, indeed, was a serious situation for us ; our camp and dogs were above the Door, while all our outfit with all the dog food was below it, and for a moment that morning our prospects looked very dismal indeed.

Leaving Henry in camp to tend the dogs, Andy, Scotty, and I set out on snow-shoes and, in five hours of most difficult and dangerous glacier travel, succeeded in effecting a passage over the glacier around the Door to its lower side near our cache, this clearly demonstrating the impossibility of transporting our cargo over such a *détour*. Securing 50 lbs. of rice and some tallow for the dogs, we then ascended the gorge and were glad to find our log-bridge still intact ; and upon climbing

the huge pile of avalanche ice, that had buried our trail deep under it, it was a mighty relief to discover that during the hours of our hard *détour* the water had worked a channel under the ice dam and had drained down to the level of the ice floor and thus had again opened the Door for our use.

This experience was indeed a warning to us to make haste, and the next day in twelve hours we transported our entire cargo first across the log-bridge, carrying each parcel separately by hand over it, and then, rushing it up over the avalanche pile through the Devil's Door, we cached it at a safe point beyond a fragile bridge at its up-stream side, the last load crossing this bridge but a few minutes before it sank and slid under the ledges, thus leaving an open stretch of water across the gorge and so effectually closing the Door for further passages that season; but this meant nothing to us, for on the return journey we were to take the N. shore line.

We had won out by the narrowest of margins, were now out of the trap, and if weather and time permitted were certain of placing our caches along the glacier line, and the last one at least well advanced towards the advance base camp site.

From March 6 to 31 the strain on men and dogs was very great, for during that time the outfit was advanced by many relays over about 15 miles of the most difficult route imaginable, with frequent storms to wipe out the trails so laboriously made with ice-axe and shovel along the shore line of the Logan Glacier and across the Baldwin Glacier and its lateral moraines to the beginning of the smooth ice on the Logan Glacier, where on the latter date Ice Camp No. 1 was established. Here we cached our wood stove and a supply of wood to be picked up on our return, and as cook for men and dogs I had to become accustomed to the use of two-burner gasoline stoves supplemented occasionally with the use of one or two Primus stoves.

On the smooth stretches of the glacier our progress was materially increased, and even the dogs seemed to realize that we were much behind our estimated time and must rush matters if we hoped to finish the job as laid out and get back over the river-bed before it became too dangerous for travel. For most of the distance so far, and especially the pioneer trips over the various stretches, only about half loads of 50 lbs. per dog could be taken, thus entailing many relays; but now, with many wind-blown stretches of hard snow of uniform easy gradients, as much as 150 lbs. per dog was occasionally taken without undue strain on our shaggy friends. Little does the outside world realize how much credit is due to the 'Husky'

and the 'Malamut' for the hard jobs that are done in the Northland; with but one meal a day of rice, or cornmeal and tallow, or lard, varied sometimes with a meal of dried fish served to him at the end of the day, he is then chained to his stake out on the snow-field for the night, where he curls up into a woolly ball and sleeps. And in the morning, with a vigorous shake to free himself of his blanket of snow, he is ready for another ten or twelve hours in harness, with nothing to break the monotony of his slavery other than now and then a gulp of snow in lieu of water, a few short rests, or an occasional fight. And yet those dogs simply adore their sometimes cruel masters and literally pull their hearts out to please them.

The night of April 13 saw all our caches placed and the advance base cache safely stowed under its heavy canvas tarpaulin weighted down with rocks and tins of oil on the Ogilvie Glacier opposite the foot of Mussell Glacier and but 6 or 8 miles from the advance base camp site. Our job was finished, but now the terrible N. shore route had to be negotiated and a dash made down the Chitina before its channel opened to block our retreat, and already we were over two weeks late for a certain safe passage.

Early on April 14 we put out with the lightest loads possible, and with tails high, thus showing that all was well with them, the dogs fairly flew down to the end of our 16-mile stretch of white ice, where we again began with wood for fuel and thus had a slight bit of warmth in the tent, and the pleasant crackle of the fire to make things seem a bit homelike; even the wood smoke was a pleasant relief from the pungent smell of the gas-jet.

During the next five long hard days of straight travel with light loads, save for one short 2-mile relay, we averaged but 4 miles per day, thus thoroughly justifying the desperate gamble we took in choosing the 'Gorge of Fate' route for the advance of our caches.

Again at Hubrick's Camp on the 19th, we gave the dogs a rest for one day and repaired our outfit, and next morning in a bad storm set off down the treacherous Chitina, where again we were forced many times to make long détours, sometimes deep into the thick forest along the N. bank, to get a safe route for men and dogs; but all things have an ending, and at noon of April 26 our caravan entered the main street of McCarthy, having taken seventy days in which to set the stage for the advent of the climbing party.

On May 7 I met the other members of our party at Cordova—

Lambart, assistant leader ; Foster, recorder ; Carpe, representative of the American Alpine Club ; Hall, Morgan and Reade, who, with Andy Taylor and me, constituted the climbing party ; and Laing, the Dominion Government naturalist—and the next day we made a run up the Copper River and North-Western Railway to McCarthy. It was a clear day of bright sunshine, and the high mountain ranges in all directions seemed to stand out in brilliant array to impress our men, who were seeing this mystery-land for the first time, and it was indeed a fit introduction to the grand panoramas they were to see later on.

In the forenoon of May 12, all being in readiness, we put out from McCarthy with a pack train of ten horses under the care of Harry Boyden and Peter Brenwick, and, save for the usual troubles on such a trip, our six days of travel up the Chitina were without difficulty, as this was the short interval between the time of the spring run-off and the summer flooding, at either of which times travel afoot or on horseback in that valley is extremely dangerous.

On May 18 our pack-train left us at trail end to return to McCarthy, thus cutting us off from touch with the rest of the world for the next fifty-eight days, and our next seven days of advance, first over the extremely rough moraines and dirty glaciers and then up the stream line of the Logan and Ogilvie Glaciers with their soft blankets of snow, gave the new members of the party a fair introduction to what was in store for them on the higher levels, for although the packs should not have averaged more than 54 lbs., all exceeded that figure and ranged up to a maximum of 101 lbs., which, of course, was out of all reason as loads for the first days of an expedition. Fortunately, experience is more convincing than advice, and progressively as we advanced from one food cache to the next our trail was blazed with articles that gradually went through the various stages from 'absolutely indispensable' to 'worthless burdens,' and this jettisoning of cargo continued even after reaching our Yukon sleds at the boundary cache when packs were transferred to them and pulled along through the soft snow.

At the 1000-lb. cache at Turn Camp at the junction of the Ogilvie with the Logan Glacier, which we reached on the 24th, we had an abundant supply of food, fuel, two-burner gasoline stoves, and, most appreciated of all our equipment, the individual pneumatic mattresses, and these were straight away put into service and continued our greatest source of comfort until our job was finished.

With a 5-tent camp rigged on the 25th at the main cache,

about 5 miles up the Ogilvie, the laborious work of sledding the outfit up to the head of the Ogilvie Glacier, the site chosen for the advance base camp, was begun, and here we began to appreciate what it meant to have this cargo placed so near to the scene of action instead of having to back-pack and 'jirk-neck' it in over that terrible 52 miles of ice approach. On the 27th, Cascades Camp was rigged at the base of the ice-falls descending on to the Ogilvie Glacier from the King Glacier, and here by May 31 all of our equipment and two-thirds of our food supply had been transported and one reconnaissance trip had been made to the look-out point at 10,200 ft. reached in 1924; and this time a clear view was had of the entire King Peak trench to the col showing that the route was entirely feasible to that point at least. This was most gratifying information, for the trench being the one apparently doubtful stretch on our map and all the rest of our proposed route contoured and laid down from photographic survey, it seemed that with good weather we were almost certain to make our goal.

But proceeding on the doctrine that a climb is not made until one stands on the summit, and preferably has safely descended to camp, I felt that we should not fail to take full advantage of our favourable situation. A climbing party of eight members all in fair condition, an excellent equipment, two months' supply of good food and fuel, and six weeks of daylight—all these things to help us travel 18 miles and climb 12,000 ft. to our summit. In the long run I suppose it is fortunate we do not all see things alike, but at times it is surprising how divergent conclusions are when drawn from the same statement of facts—or is the explanation right there—it is not the 'same' statement of facts, for *facts* never are appraised the same by any two observers. Evidently such was the case with us, for we were wide apart in our views as to what should be done—all the way from a desire to advance the bulk of our outfit to a camp site near the col and from *there* to establish and stock our fly camps along the plateau until a short dash could be made from the last one to the summit, to a rebellious outburst that we should 'stop this ridiculous work and go and climb the mountain.' A little dash of 18 miles over an unknown route involving a climb of 12,000 ft. of course was entirely out of the question, but with a quick, fairly easy route up the trench for 7 miles it did seem that the original estimate of twenty-one days to make the ascent and two days for the descent should prove ample; so, making a further allowance for eventualities, we

prepared for a campaign of twenty-eight days, and immediately assembled in each of fourteen brown paraffined canvas bags two days' rations for eight men, with meat rations on a more liberal scale packed in white canvas bags.

Each of these bags, the fuel and all other parcels to be taken along, weighed from 34 to 40 lbs. each, thus being in convenient form for back-packing, and during the first two days of June twenty-eight of these packs, with other equipment and one Yukon sled, about 1500 lbs. in all, were cached on top of Quartz Ridge about 1000 ft. above our camp site and the last rock outcrop of any considerable size along our route of ascent. On June 3, at 6.30 A.M., with a clear sky and brilliant sunshine on the high ridges about us, we set out with heavy packs and light hearts to try conclusions with our giant with considerable satisfaction in the thought that we were leaving behind a month's provision to draw upon in case of need.

The route to Observation Camp, at 10,200 ft., although somewhat intricate because of many deep crevasses and steep side slopes, was familiar ground to us, and with the use of the sled and our pack boards we were consolidated at the foot of the King Peak trench by evening of June 4, and that night we experienced the first of many violent storms that swept over us while on the high plateau—storms that at times threatened to blow us off the mountain, and which several times probably would have blown our tents away but for the weight of our bodies on the sewed-in strong canvas bottoms.

With a route to prospect and work up the trench as far as the col, we put out next morning on snow-shoes in considerable fog, each man packing about 35 lbs. and the leader armed with bundles of willow switches the size of a pencil and from 2 to 3 ft. long, these to be stuck in the snow at intervals of 100 ft. to mark the trail and thus make the route safe for work in all conditions of weather; for on a white background these dark willows can be seen for long distances and, stuck a few inches into the snow, will wave and stand against all but the most violent gales; each time when going over such a blazed trail after a heavy snowstorm the switches are lifted and reset in proper position.

Our trip up the trench that day was a trying one, for, besides constant sounding for crevasses, the fog obscured the route much of the time and a raw wind came down from the col which by 3 P.M. became so severe that at 13,200 ft. we were forced to cache our packs and return to camp. Having started in fog, with occasional gaps to give us our bearings, and then worked

most of the day in what might have been called a mild blizzard at about zero temperature, our arrival in camp in brilliant warm sunshine, with the trench and col again clear, showed how local and uncertain storms might be around Mt. Logan, and from this it was evident that we must carefully prospect and blaze our trail and then continue to advance regardless of weather conditions; and as later events proved it was only by adherence to this policy that the summit was finally made.

With our trail now well marked for several miles we set out next morning with a heavy sled-load with all eight members on the tow-line and handle-bars, and in four hours had advanced it many miles to the foot of some ice-falls a mile below our cache, and here, leaving the sled and part of the cargo, we back-packed the rest to a point a mile above our cache and the same distance below the col, for here seemed to be the most favourable spot for our all-important Col Camp.

Relieved of our burdens, we made rapid progress up to the col to learn our fate—I perhaps the most pessimistic of all—little imagining the shock we were to receive, for upon arriving at the col, there to the E. of us, instead of the fine gradual slope dropping down from the high plateau of the massif to the col and trench as the map indicated, was a break in the levels of about 1200 ft. filled in with a veritable jumble of broken ice-slopes, while just beyond to the E. of this and the col the plateau glacier broke over the cliffs for a plunge of 7000 ft. to the Seward Glacier below, and the upper reaches of the massif were blanked from view and could only be speculated about. This was indeed disheartening, and I am sure more than one member of the party was confirmed in his view that a systematic reconnaissance must be arranged while at the same time transport work was being carried on. Our expedition was definitely committed to this route for this year, and we must bend every effort to discover a route through to the level of the high plateau.

Lambart returned to camp with the second rope, while I, with Foster, Reade, and Morgan, ascended the E. shoulder of King Peak to its crest at about 15,000 ft. and from here secured a fair view across the trench of the slopes on the massif to an altitude of about 16,000 ft., where here again our view was obstructed by a bold ice-face that ran below a series of ice-falls to the eastward until it broke off at the ice-faces above and to the E. of the col. It appeared that by attacking the slopes of the massif, a mile or more below the col, a route might be worked through the ice jumble and some vulnerable spot might

then be discovered along the face of this parallel ice-cliff or rib just mentioned.

To the W., for a few minutes in the last rays of the setting sun, we were treated with perhaps the most magnificent spectacle seen on our whole expedition: to the S. of us and 9000 ft. below lay the Seward and Columbus Glaciers with the magnificent Saint Elias range rising in the purple sky beyond, showing between its peaks grand views of the mighty Malaspina Glacier with its myriads of moraines, while fringing these crests the blue Pacific outlined the whole panorama and all agreed that it was ample reward for our heavy labours.

The next day another sled-load of 650 lbs. was hauled to the base of the ice-falls and then back-packed to a camp site at the base of the line up the massif tentatively chosen, and here Lambart left Foster, Reade, and me to rig camp and make a reconnaissance next day, while he returned to Observation Camp with the others to begin the arduous task of relaying up the balance of the outfit.

The Col Camp site being at somewhat over 14,000 ft. elevation we soon began to note the effect of the altitude, for it visibly slowed up our operations. The site for the tents was on a snow-slope which necessitated digging out and levelling off the snow bank, and a few minutes' work with the long-handled shovel, brought along for that purpose, was enough to start very rapid breathing and soon after a feeling of exhaustion, and with some the motions became painfully slow, while at night even at this level several of us had short spells of suffocation when it seemed that we could not catch another breath, the distress rapidly disappearing upon sitting up in our bunks.

After a night of torture for me nursing an overstrained eye, with the efficient work of Foster as doctor and cook, we got off with a late start next morning on our voyage of discovery and took the first steep slopes above the camp on snow-shoes, but were able soon to shift to crampons, and for the rest of the day found the wind-blown snow ideal for their use, this adding materially to our speed and distance travelled during the day.

But progress was slow during the early hours as we worked in and out among the jumbled mass of ice and threaded our way through the occasional criss-cross of crevasses; each time upon seeing our way clear through one stretch we wondered if it would prove to be but the entrance to some trap beyond. Thus one strange formation of ice after another was put behind us as we steadily climbed diagonally towards the high plateau to the eastward above the col, circling under the 'Diamond

Sérac,' around and over the 'Dormer Window,' up the 'Cork Screw,' and on to the 'Hog Back,' when, upon dropping to its far side, to our dismay we saw ahead of us the bold ice-face towering above us, and which we had been following on more or less of a parallel course, suddenly end at a 300-ft. face of the cliff glacier and to the E. of the col, descending to the Seward Glacier; this was indeed a shock to us, for our fine route had simply ended, had dropped to the level 7000 ft. below, and we did not wish to go that way. As our bold ice-face was topped with cascades and hopeless ice-falls as far as we could see to the westward, and apparently was too steep to negotiate with steps, we seemed at last to have reached a cul-de-sac. The shock took the keen edge off our appetites, but this clearly was the proper time for a snack, so we halted and shifted a bit of cargo. While doing this, I noticed not far beyond and a bit above us a line running down the ice-wall that looked as if there might be a breach in our barrier, so I forthwith made off to investigate it, and there at the most eastern point where it could possibly occur was a split clear through our ice-rib with a ledge along one side on which it seemed possible to effect a passage, although for some distance beside the ledge the crack opened clear through the ice mass and gave a view of the glacier thousands of feet below. A protest from one member that we should not attempt such a passage made me doubly careful in negotiating it for the first time, for it seemed to be our only hope and we simply had to make it go. Once over the narrow ledge and beyond the portcullis of a 10-ton ice-slab that overhung the far end of the route the passage did not seem so dangerous, and several days later, when we relayed through it, the bottom had been filled in with considerable snow and, being packed down, was much safer. At any rate 'McCarthy's Gap' afforded us a passage to a good route past the 'Stage Coach'; up the 'Avenue of Blocks,' huge rectangular ones three and four hundred feet square; through the 'Tent City' to 'Glissade Hill,' then half a mile along 'Friendly Crevasse' to its one safe bridge, and so on to the exposed slopes above the ice jumble, these slopes forming the lower end of an upper plateau trench which, according to the map, carried up over the main ridge to the high plateau on its N. side. Continuing to mount a succession of easy slopes until we were at an elevation of about 16,500 ft., we had a good view of the intervening slopes to about 17,000 ft. beyond which there was a short steep rise and then two or more miles beyond a high double peak on the crest of the main ridge of the massif.

Some place, well this side of the ridge, in a sheltered spot, at about 17,000 ft., clearly was the logical site for our next camp and, as there were many steep steps on which we wished to cut good steps for use next day while packing, we put about and retraced our route to the Col Camp, where at 7 P.M. we found the others of the party already had arrived with their heavy packs, and all were pleased with the good news we brought them.

Heavy storms made work in the soft snow very laborious and difficult during the next two days and forced us to be content with advancing four small packs as far as the 'Hog Back' and relaying up the balance of our caches from below, but on the 14th the morning broke clear and all hands were away at 6.30 on snow-shoes, each carrying packs averaging 45 lbs. The snow was soft and varied from 4 to 24 ins. in depth, thus making progress very slow, and the danger of avalanche was great because many slopes were so steep that up and down routes were impossible, and they had to be negotiated by long diagonal traverses. At noon we reached the end of our willowed trail at the small cache on the 'Hog Back'; here we had luncheon, distributed the cache among the members of both ropes, and then pushed on, following our reconnaissance route by the aid of our many familiar landmarks until at 5.30 P.M. a heavy snowstorm enveloped us and forced us to make camp at the base of 'Glissade Hill' at about 15,800 ft., the storm becoming very violent early in the evening and confining us to camp during the 15th. Early next morning we struck camp and set out with the whole outfit for the upper stretches and reached the top of 'Glissade Hill' in dense fog, thus making the route from here on for some time very obscure, and it was only by an occasional glimpse of some familiar ice-slope, a snow-bank, or a crevasse that we followed our proper line, this time carefully 'willowing' it as we advanced.

On this day the combination of deep snow, heavy packs, and altitude told rather severely on all of us and finally forced us to camp considerably short of the site I had chosen, and it was here when rigging that camp that we discovered how much on edge we all were, ready for a frolic or a fight with our best friend in response to his smile or his scowl. We all were dreadfully uncomfortable, tired and hungry, and consequently very peevish, but a quiet suggestion that we 'rest a bit and then be *men*' brought back a cheerful feeling all around, and soon we were as comfortable as circumstances would permit in our 'Windy Camp' at about 17,000 ft. and perhaps three miles

below the double peak on the ridge ahead ; and well it was, for at 8 P.M. the temperature had dropped to 27° below zero, and the record for our trip, 33° below zero (F.), was recorded during the night.

For the reconnaissance of the next day, the 17th, my diary reads : ' In about five hours of easy but slow going, willowing the route, reached the steep stretches on the back side of the double peak and then its saddle at about 18,800 ft. and waited half an hour for view. Fog too dense, so returned to camp and turned in at 8 P.M. Undecided about next move, but probably another reconnaissance and relay of food as both needed.'

Next day Lambart again went back with the others for provisions and fuel, while Foster, Reade, and I made a careful examination of the S.W. slopes along the double peak, and found them to be devoid of any possible route toward the eastward ; meanwhile a storm blew so heavily that we could not stand up against it and had to lie prone and peer over the crest of the saddle, getting indistinct glimpses of another double peak from 2 to 3 miles farther on, but no view of the intervening terrain. However, it was evident that our route was not over or along the S. side of this peak, as one or two had hoped, but that we must follow our original plan and pass over the main ridge to its northern slopes, so we circled to the N.W. around this ' False Double Peak ' and, upon passing well over a saddle in the main ridge at 18,500 ft., we clearly saw the steep though smooth ice- and snow-slopes leading down towards the N. shoulder of ' Double Peak ' beyond, an easy route for us to take and a good camp site at the base of its N. shoulder. As yet we had sighted no peak beyond this double peak, but, in spite of my hope and arguments of others to the contrary, I felt certain our goal lay further on. At all events ' Windy Camp ' was too remote from which to make a dash for the summit ; at least one more camp was needed, and that preferably at the base of the N. shoulder of ' Double Peak.'

Arriving at camp that night at 11 o'clock the thermometer read 32° below zero, and stood at 25° below zero at 7 o'clock next morning, with heavy snowfall throughout the night and up until nearly noon, when we set out breaking trail down the slopes until we met the others at ' Stage Coach ' staggering upward under their heavy loads.

After a luncheon of ginger snaps, and hot tea from our thermos flasks, we equalized packs and set off up-grade wearied by that

exhausting fight of stepping two feet forward and sliding one foot back with a load to bury you deeply whenever you lost footing altogether.

Emerging in perspiration from the protected trail among the ice-blocks to the exposed slopes above Glissade Hill, we were struck by a piercing cold wind that sent a terrible chill through us, and for a moment it seemed that we must turn back to seek shelter, for there was none near at hand ahead ; but there now was no assurance of better weather below, and the Col Camp was three times as far away as Windy Camp, so as there really was no choice we were forced to forge ahead as quickly as possible, and by 10 P.M. all hands were stowed in their eiderdown bags for the night apparently little the worse for the ordeal, with the exception of Morgan, whose toes had a touch of frost-bite. It was now evident we had reached the limit for the safe use of rubber or oiled leather footgear, and must shift to dry tanned moccasins with heavy felt insoles and four or five pairs of heavy woollen socks ; this shift was made and the moccasins used until our return to the Col Camp.

It was evident next morning that Morgan should not attempt to go farther, and Hall generously volunteered to accompany him down, but asked first to be allowed to pack our heaviest load forward to the new camp site before descending. The 20th broke very cold and stormy and we did not start on our relay to the higher camp site until 2 P.M., which was too late in such low temperature to attempt to go the full distance desired ; but it was imperative we should make some progress forward, and our loads were finally cached at the rock-saddle of the main ridge at 18,500 ft., and we returned to camp at 6.30 to enjoy a delicious supper prepared by Morgan.

Another stormy forenoon followed a bad night with low temperature, and at 10 A.M. when Hall and Morgan, at the ends of their 150-ft. rope, set off down the trail, with its first willow just visible, conditions were too severe to begin an advance, so the climbing party, now reduced to six, turned in to await a call. At 3 P.M. the wind ceased, the fog lifted, and we were again in warm sunshine, so camp was struck and at 10 P.M. we had supper in our two-tent 'Ridge Camp' at 18,500 ft., probably the highest regular camp ever established on the North American Continent. My diary entry was : 'Day not lost, fine trip, a bit cold but comfortable and camp alongside food cache, but not close enough for final dash if at all possible to make one more camp, preferably beyond Double Peak.'

Here at our highest camp the altitude told severely on some

Phot. H. F. Lambert.

AN AVALANCHE IN THE MT. LOGAN GROUP.



TO THE
ADMINISTRATOR

members and visibly affected all of us ; actions were painfully slow and inefficient, and the smallest exertion caused rapid breathing and a desire and need for rest. The gasping for breath and the rapid breathing clearly indicated that it was not exhaustion alone but altitude that was affecting us. Much of the time while at the high levels I noticed a metallic taste whenever I took a deep breath, the same as one sometimes experiences in an electric storm. Contrary to expectations, however, at this camp I slept soundly without the slightest feeling of suffocation, such as I had felt on a number of nights at lower levels and especially after a day of comparative idleness, while a day of heavy work seemed to free me from this distress at night.

The piercingly cold atmosphere next morning necessitated the use of heavy gloves and mittens, so that the operation of striking camp and fixing packs was very slow and delayed our start until about 11 o'clock, when we set off with all but one 'two-day' bags of provisions, which now, with only six men, could be made to do for three days.

Our route down the snow and ice dôme, which we later came to know as 'Hurricane Hill,' was easy to negotiate and we made fair progress until we reached the soft deep snow stretches a mile or more beyond, when our pace became very slow, and at 2.30 p.m., after only about three hours of travel, we were forced to stop and rig Plateau Camp at about 17,800 ft. But this was none too soon, for almost before we were settled inside our tents a violent wind swept over the plateau and engulfed us in a driving snowstorm that continued throughout the night. My diary reads: 'Had supper at 4 p.m., discussed plans with all hands and decided to take first good chance for mountain. Have 8 days' grub and fuel for venture; could hold out for 10 or 12 days on grub available, but do not think strength of all members of party would last that long for task ahead, probably two peaks to make ; will be severe strain ; must push and push fast as possible and then *some more*.'

June 23 is the day we shall all long remember, for it saw the end of our doubts and our fears, even if not the finish of our labours and our troubles. We climbed our giant to its topmost pinnacle and nothing else mattered to us so long as all hands got down safely.

During the night the storm raged with such violence that at times it seemed as if our tents would be whipped to shreds ; but by morning its force was spent, leaving us in a deep blanket of soft snow and a dense fog which enveloped us until about

10 A.M., when a glaring sunshine broke through on the white slopes about us, and soon we were off, with show-shoes, on two ropes for the crucial test, Foster in the lead, his rightful place had he been able to have accepted the leadership of the expedition offered him in 1923 for a supposed 1924 campaign, when he was unable to leave home. By 11 o'clock we had circled intervening ice-ridges and were in view of the whole of 'Double Peak,' and an hour later reached the base of the final slopes that led to the saddle between its two dômes. Here we rested, had a snack, and shifted to crampons. The route to the summit of this double peak was steep but appeared to be free of difficulties, and although the peak undoubtedly was the western and lower one of the two highest shown on the map, with a difference of only 50 ft. in altitude between them, I felt we must climb both in order to be sure of setting foot on the highest point of the mountain. Hence now was the time to make this peak while *en route* to whatever might prove to 'angle' higher from its summit; so I worked our course zig-zag up the westerly face, cutting steps at a few points where steep slopes made them necessary, and in brilliant sunshine with an almost clear horizon we made the summit of 'Double Peak' at 4.20 P.M. The panorama that lay about us on all sides was truly an impressive one, and to the N.E. there extended as far as the eye could reach hundreds of square miles of rugged mountainous country uncharted and unknown, with a comprehensive view of the Saint Elias range to the S.W., never before so thoroughly seen by man. But to the S.E., a mile or more away and with a thousand-foot drop between, rose the final heights of our mountain which terminated in a spire-like summit, so we knew that we must climb still higher that day, for the Abney Level showed this summit to be at least 100 ft. higher than the one we were on. After a short rest, while another snack was eaten and some pictures taken, Foster, Carpe, and I dropped down the E. side of the peak to the saddle on the main ridge and there awaited the arrival of Lambart, Reade, and Taylor, who unfortunately had cached some of their packs on the trail below, and so were forced to retrace their steps and circle the base of 'Double Peak.'

At the saddle we cached our snow-shoes and other unnecessary articles and then, at about 5.40, in a light snowstorm with a raw wind blowing, we set out for the final leg of our long journey.

The ridge before us had two summits, the W. end being a level stretch, while the easterly end rose from a deep saddle,

steeply, by a sharp snow-ridge to almost a spire-like top. The wind-blown snow surfaces were ideal going for our crampons, with only an occasional out-cropping of ice, which we circled as much as possible and thus avoided cutting more than about 200 steps, and in about two hours' time my head topped the N. ridge, there to see close at hand my first sight of the 'Spectre of the Brocken' with a distinct rainbow circle around my reflection. Each member of the party had a good view of himself crowned with a halo of victory as he came up on the ridge; it was a novel treat to all of us excepting Carpe, the only member who ever had seen this strange phenomenon. But there was no time now for us to tarry and experiment with it, for a sharp drop in the ridge still lay between us and the summit and might prove to be an impossible barrier, so I hastened on and was relieved to find the cleft opened towards our line of ascent from below, well filled in along the crest of the ridge, and by a sharp steep snow arête we quickly mounted to the final crest and our goal at 8 p.m., when there was a handshake and smile all around, for right then at least the joke was on the mountain instead of on any one of us.

Here again, although not nearly so clear, we could see over a vast area of new territory, but with the temperature near the zero mark and heavy clouds rolling in from the S.W., we stayed only long enough for pictures to be taken, to note a temperature of 4°, and for a record to be deposited by Carpe; then began the descent, with Lambart leading. In the dim light of the approaching storm the route back to our cache at the saddle of the main ridge was well defined by the cut steps and trail in the snow, but from here on with no footprints or willow markers to follow, as our supply had given out a mile or more from this point, and the blinding effect of the heavy blast that now assailed us, it made the laying of a safe course a very difficult and dangerous task, for, with no dark object in sight to give us a sense of distance and direction, the white expanse seemed to lie in a horizontal plain all about us and thus effectually obscured the dangerous slopes and cliffs that bordered our right hand, until at last, with our horizon cut to but a few feet, further advance was too dangerous, and at Andy's suggestion I called a halt and we dug caves in the snow-slope to give us some protection from the cold wind. During the night the storm continued, with a heavy fall of snow, and a reading of 12° below zero was recorded before the thermometer was snowed under and lost, and there was slight improvement in conditions by noon next day, the 24th. But the altitude and

exposure were seriously telling on our party, and it was imperative that we should get down to lower levels, shelter, and food as soon as possible; so at noon I ordered a move and began to get the ropes ready, but it was 2 P.M. before all six of our party could be got out of those miserable little snow-holes and ready for the start, with Andy this time in the lead. In spite of his great care in groping his way along through the deep snow on the steep slopes, at times both he and I were unable to detect the abrupt rises and drops in the slope, and within the space of twenty minutes Andy had a miraculous escape from injury in a fall of almost 30 ft. over an ice-ledge to a snow bank below, while I took a plunge of about 15 ft. Such were the uncertainties that beset us until Reade suddenly discovered one of our willow markers near at hand and we made straight away for it, for here was our trail back to Plateau Camp and all the comforts of good food, soft mattresses, and warm sleeping-bags that it contained. By carefully scouting each willow, Andy, Reade, and Lambart made rapid progress through the storm and reached camp that night at about 8 o'clock, while my rope, having stopped for a time while a pack was being fixed, lost touch with the other party in the lead, got turned around, and for an hour or more back-tracked towards the summit until Carpe raised a question as to the pitch of the slope we were traversing, for it fell away on the left hand when it should have been to the right; so after a further test for some distance we put about and wearily retraced our steps and soon, because of our haste in the foggy darkness, lost our willow trail and thus condemned ourselves to a night of slow trudging in a world of weird uncertainty with an occasional halt to catch our breath and two attempts to dig holes in which to protect ourselves from the severe winds while we tried to sleep. But muscular action was the only thing that brought relief to mind as well as body, so we kept moving in a world of unreality until with the direct rays of the sun the fog lifted, our horizon expanded, and familiar terrain came into view, and finally at 5 A.M. we reached camp after thirty-four hours of severe strain since leaving the summit of the mountain. Here again, as so many times on that trip, Andy was 'Johnny on the spot' and treated us to a fine breakfast, dinner, and supper of boiled chicken, potatoes, fried biscuits and Ovaltine, before we turned in for our first real sleep in two days. But delicious as the comforts of Plateau Camp were in comparison with the bleak stretches above, it was evident that its nourishing dishes and warm bunks were not all that our party needed, as food and sleep did not bring

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bodies and minds to a normal state, for all of us seemed to be very unsteady in our movements when we consented to move at all, and some conversations were decidedly flighty and incoherent, so it was apparent to all of us that we must get down to lower levels as soon as possible. Even so, it took five hours the next morning to have breakfast, fix our small packs, and abandon Plateau Camp with the two fine tents and all else that we did not absolutely require to see us through to the Col Camp.

From 11 A.M. that morning until 1.30 A.M. next morning, when we reached Col Camp, we passed through ordeals that in our weakened state almost spelled disaster for some of us, and perhaps were avoided only by members of the party taking turns at being strong while others perforce were weak. With hands and feet touched by frost, eyes weakened, one member snow-blind, and all exhausted from the severe ordeal, we were in no condition to withstand the frightful blast that struck us at the base of 'Hurricane Hill,' and then again the heavy snow-storm that obscured our route down through the maze of jumbled ice on the slopes to Col Camp; but by 3 P.M. all hands were over 'Hurricane Hill' and in the shelter of the ridge at the 18,500 ft. camp site, and at 1.30 next morning we were again at Col Camp, enjoying Andy's culinary art in a sumptuous meal that was worthy of several names; breakfast and luncheon, or luncheon, supper and breakfast, whichever way we chose to look at it, for we had had no meal since 7 o'clock the morning before.

At Col Camp, with another outfit of pneumatic mattresses and sheepskins, Primus stoves, and an abundance of food and fuel, we rested for thirty-six hours, of which time my diary reads:

'With Foster busy treating and bandaging frozen fingers and toes, all first joints on my fingers and thumbs frost bitten and turning black, Lambart's toes frozen, Foster's big toe and two fingers, Carpe two toes and two fingers, Andy one finger . . .'

But soon after noon on the 28th we were again under way, and again abandoned everything we did not actually need to get us to the advance base camp, and, back-packing our outfit to the base of the ice-falls, where we had cached our Yukon sled, we shifted our burdens to it and made good time down our old trail with here and there some of our willow markers still appearing above the snow; again back-packing from the snow-dome down to the top of Quartz ridge, which we reached at 9 P.M., we came within sight of Cascade Camp 1000 ft. below.

Four weeks before, while relaying up our supplies, we made

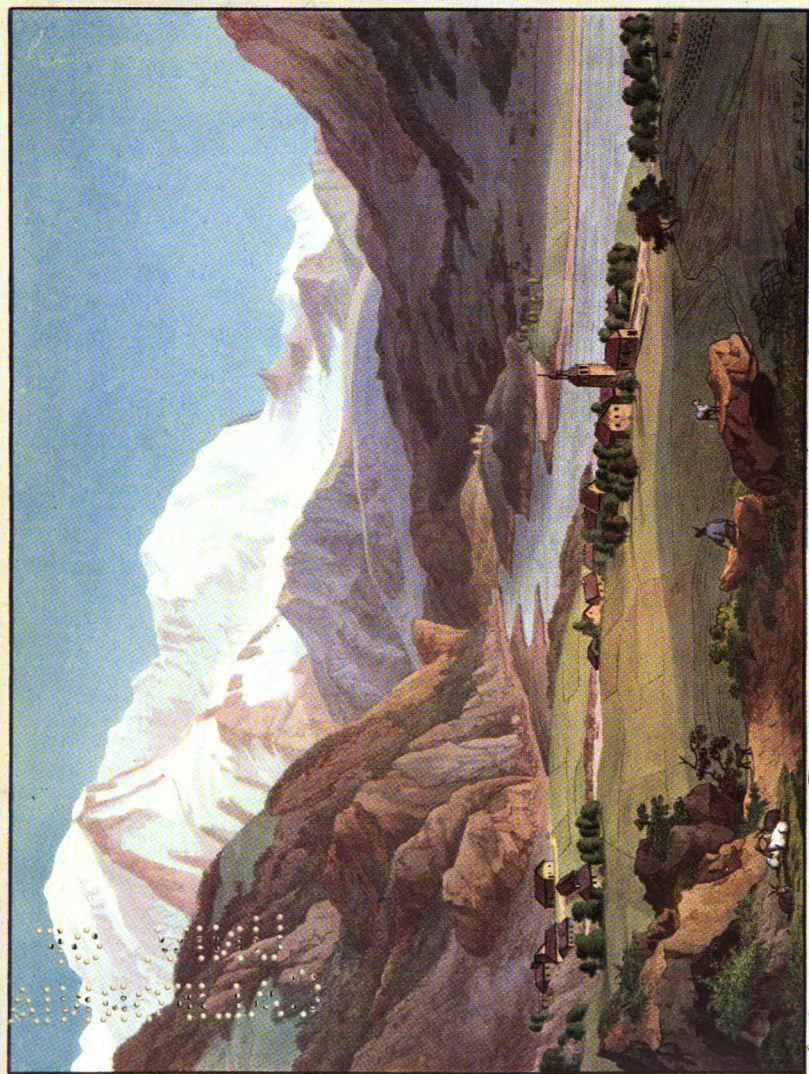
the descent of this stretch in fifteen minutes, but this time, with snow in avalanche condition and muscles weary, we were three hours in reaching our base.

Here we found a note from Hall and Morgan announcing their safe arrival and contemplated departure after a rest of a day or so, and thus by notes we traced their movements out to Hubricks, from which camp they left for McCarthy a few hours before our arrival there.

By slow stages and with considerable rests at Cascades and Turn Camps we made our way slowly down the Ogilvie and Logan Glacier, abandoning our sleds and all heavy equipment at the end of smooth ice near 'Point,' and back-packing over to our Baldwin-Frazier food cache and arrived there at noon of July 4, to find that a bear or wolverine had solved the problem of opening cans and had left us little or nothing; and the same misfortune befell us at the next cache at Turn Point, but the joy of again being in the land of living things, of running water, and green vegetation after forty-four days on the ice more than made up for our losses. The next day the long rough stretch over the Chitina was negotiated in about seven hours, but not, however, until several of us were forced to abandon some of our cargo *en route*; even the weight of expensive unexposed films seemed too much to endure unnecessarily, and were left to mark our trail. On the N. bank we found a good cache of food hung high on a cross-pole by Laing, the naturalist, for us, and at 9 P.M. we turned in for a good sleep after a real meal of bacon, sausages, rice, sugar, butter, biscuits and tea. The next day all were again at Hubricks, where Laing welcomed us after his long weeks of solitary life with his animal friends, and here we revelled in the luxury of baths, food, and rest.

Then came the question of our return to McCarthy, still 86 miles away and with our party too weak to 'whip-saw' the lumber for boats; and, all being anxious to get home, we finally decided upon rafts for a descent of the river, and here again the call for haste made us shove off on two rafts, three men each, that had insufficient buoyancy to ensure a dry safe passage down the turbulent Chitina at flood times. With great skill from long experience, Taylor managed to keep his raft in the northerly channels and in about ten hours ran 50 miles down to 'Rush Pond,' and next day from there he, Lambert, and Reade walked into McCarthy and sent out the news of the 'Conquest of Logan.' Foster, Carpe, and I were less fortunate, for, less foresighted, I allowed our raft to be

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Vue de Levoz de l'Aiguille du Grist et du Glacier de Bionnassay

Levoz, France, 1860

Reproduction of an old print from the collection of R. W. Lloyd showing the Aiguille de Bionnassay.

swept into the main channel, and soon, for an hour or so, we had a very exciting and dangerous time while running the rapids at terrific speed when a mere touch of the jagged rock shore-line would have capsized our craft and sent all of us to the bottom ; but eventually we got clear of these dangers and swung rapidly around a big bend in the river and close to the inside bank of the curve, when suddenly, without warning, a short cross-stream, flowing at great speed, dashed down upon us and bore the starboard side of our raft well under water. Hastily we jumped to port and took a sea on that side, and, suddenly shifting our weight again, this time the starboard side was washed completely under and we capsized. Carpe and I came up clear, while Foster was thrown under the raft and hit on top of his head, but even that was not enough to keep a good man down and in a moment he came up 10 ft. away and soon joined us on the upturned raft with all our outfit lashed to its under side. Finally running the raft aground at the head of a gravel-bar, we worked for an hour or more in the icy water cutting our outfit adrift and carrying it ashore ; then with the use of the upturned raft we ferried across to the right bank and camped for the night some distance below Short River, about 70 miles from McCarthy. Here, next morning, caching all but the barest necessities, each such process justifying more and more in our minds that declaration that ' Man wants but little here below,' we set out on our long tramp for McCarthy, which we reached at noon of the 15th, just as a relief party headed by Andy Taylor was about to search the Chitina Valley for us. And thus ended our interesting adventure on which Andy and I had spent exactly 180 days to assist in its accomplishment.

THE FIRST DIRECT ASCENT OF THE AIGUILLE DE BIONNASSAY
BY THE NORTH FACE.

By R. W. LLOYD.

(Read before the Alpine Club, December 13, 1926.)

EVERYONE knows the Aiguille de Bionnassay, and no doubt some of you have stood upon its summit, or, rather, have sat upon it *à cheval*. It is nevertheless one of those peaks of the Mont Blanc Range of over 13,000 ft. which is the least frequented during the season. Some years there

are no climbers at all, on others, a number of parties reach the summit by the somewhat easy Miage arête.

And yet there is something peculiarly attractive about the Aiguille de Bionnassay. It is, indeed, one of the most beautiful, delicate and fairylike of mountains in all the Alps, rising as it does over a sea of ice and snow to its point of a needle, with its knife-edged arêtes sweeping down on either side, sharp and clear, like blades of steel.

For years I had desired to climb the mountain.

In 1919, when I made the first crossing of the col from the Glacier de Bionnassay français to the Glacier de Bionnassay italien, I said to Joseph Pollinger that I felt sure that there was a magnificent new snow-and-ice climb to be made direct up the great N. face of the Aiguille de Bionnassay to the summit. He agreed, and we determined to make the attempt the following year.

The lower part of this great N. face had been attacked once before on its W. or right-hand side by Mr. F. Craufurd Grove and party on July 28, 1865, who then gained the Tricot arête and thus made the first ascent of the Aiguille de Bionnassay. He has left a delightful account of this climb in 'A.J.' 2, 321-32.

This party, as you will there find, rejected the direct climb to the summit as 'obviously impossible' and took a line to the lowest point of the arête between the Aiguilles de Tricot and de Bionnassay some hours below the summit of the latter, along which they crept, painfully and dangerously, balancing 'upon the crumbling insecure snow crest,' crawling 'round pinnacles of slabby treacherous rocks, all shiny with half-melted snow,' and finally hacking and hewing a footway on a 'vast sheet of steeply-rising ice' to the top. The photograph which I am showing supports Mr. Craufurd Grove's vivid description of that difficult and adventurous climb. Those who know such knife-edges, with their overhanging corniches of ice and snow, will no doubt agree with Mr. Craufurd Grove that 'an arête is frequently much less pleasing when it is underfoot than when it is seen from below.'

A mountain is like a fortress; it should be studied before it is attacked. For that study a series of impossible seasons gave us ample opportunity. In 1920, 1921, and 1922, either the great bergschrund which traverses the whole face was bridgeless and uncrossable, or we could not get enough settled weather to make the attempt. We spent our time studying the climb which we could not make.

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51. Chalonge

Stiquette de Chamassay from la Courmette

Photo-Graf. Grenoble



TO MY
LIBRARY

In 1923, a careful examination of that formidable face again offered no hope of crossing the bergschrund.

In 1924 the face looked better, but although we waited with that deferred hope which maketh the heart sick, not once did we get those few days of really fine weather essential to render the snow at all safe.

In 1925, although prolonged bad weather and heavy snow in the latter part of June and early July made the mountain look more favourable in the middle of the latter month, the unsettled outlook continued to baffle us. Three or four times we set out for the Tête Rousse, but the weather always drove us back, sometimes even before we reached the hut.

At last, on July 17, we arrived in a snowstorm, wet through, to find some inches of snow at the cabane. To say the least this was not encouraging. More rain and snow in the night; but in the late morning it cleared sufficiently to tempt us out, so we decided to explore our route, make steps, and then attempt the climb next morning.

And so, on July 18, at 6.45 we left the hut. The snow was hard and good; with our crampons we made rapid progress, so that at 9.30 A.M. we were within a very short distance of the Tricot arête up which the party of 1865 made their climb. It was exceedingly steep here, but we were within reach of the direct route which we proposed to take. This lay at first well to the E. across the face of the mountain and then turned upwards direct to the summit. The hour, however, was late, and the weather looked bad, so Joseph and I had a consultation. We decided that the lateness of the hour and the doubtfulness of the weather made the new route impossible.

In our disappointment, I suggested that we might at least follow and repeat the route of 1865, and that we should anyway go a little further and watch the weather.

In a short time, going up very steep snow, we struck ice, and after further discussion we decided we were much too late. The weather also was growing worse every moment, and so at last, much to Adolph's disgust, we decided to retrace our steps down the very steep snow and ice we had come up, the lower portion showing a deep track as we came down the rapidly softening snow.

We still hoped that the weather would be better next day; but in an hour or so we had the mortification of seeing our steps disappearing under the heavily falling snow.

No, there was nothing to do but return to Couttet's hospitable roof at Chamonix.

It was, I confess, a bitter disappointment, the more as our tracks stood out for some hours to tell the climbing fraternity something of what we were after.

I need not proceed with the narrative of that disappointing year. Sufficient to say that on July 21 and 26 we went again to the Tête Rousse, but on both occasions the weather defeated us, until at last, as we could see the ice appearing more and more clearly from under its shrinking mantle of snow, we decided there was nothing to be done but to leave the climb for another year.

Let no lover of the mountains despise the humble virtue of patience. The mountaineer must know when he *cannot* as well as when he *can* make a climb, if he is to avoid not failures merely, but fatalities. And we were notably consoled for these delays by the experience of this year—first because we found that if we had made the attempt on that day of our disappointment, July 18, 1925, the state of the weather and ice would have placed us in grave difficulties and very considerable danger, without even the possibility of accomplishing our design, and secondly, because these prolonged studies gave us the necessary knowledge when heaven sent us the opportunity.

The dreadful weather of 1926, which lasted into July, filled all the mountains with snow in a way unequalled since 1914 or even then, and we had hopes that these snows would bridge the bergschrund, which had been so long like an impassable moat round the fortress of the Aiguille.

We arrived at Chamonix on June 30, and we were encouraged in these hopes the next day when we went to the Col de Voza to look at our mountain. Certainly the bergschrund looked less formidable.

Joseph went down to see the proprietor of the Tête Rousse, who, knowing us well and remembering some small service we had been able to render him, said he would let us have the key whenever we wished—an unexampled favour.

Then came a fortnight of weather too bad to go out in; but on Friday, July 16, things looking better, we set out for the hut, which we reached at about 7 P.M. on the second day after its opening.

The night was fine but cloudy; at 2 A.M. the snow was soft as water and obviously impossible.

Again we waited; a brilliant day was followed by a clear night, and the snow being much better by 2 A.M. we decided to start.

Aiguille de Bionnassay from Col de Voza.



Photo R. W. Lloyd.



TO VINU
ALBONIAO

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Aiguille de Biomassay from Cul de Vosa.



Photo R. W. Lloyd.



Late the evening before, that fine climber Captain Harold Porter, who seems, from an announcement in the papers, to have had a dual object in visiting New Zealand, which, it is to be hoped, may not result in ending, as is usual, his climbing career, turned up at the cabane with his party.

His intention was to go up Mont Blanc, and his early start in the morning roused us rather too soon. We waited half an hour, and then, at 2.50, quite at the end of our patience, set out and descended by candle-light very slowly to and over the Glacier de Bionnassay, the crevasses of which were covered with very soft and bad snow and ran the wrong way for the direct crossing which we had to make.

We ascended by the same steep slope as last year, now covered with the débris of séracs and avalanche snow; then, turning sharply to our left, we mounted steeply, the snow becoming better the higher we went.

At 4.25, having made good progress, we stopped to put on our crampons, which took us a quarter of an hour; then we proceeded a few yards without cutting, but, the angle becoming much too steep, Adolph had to make steps, and so we ascended a slope of constantly increasing steepness, cutting all the time, until we were under the great séracs which hid the Tricot arête from view.

Here, again turning sharply to our left, E., we traversed a little way up and across very steep snow, and so came on to the great traverse across the face of the mountain.

As I looked at the magnificent expanse of ice and snow, I saw how apt were the words of Mr. Grove about that 'frowning and rugged wall . . . equally offensive and impracticable' where 'in places the snow sheets appeared to fall almost with the curve of a bellying sail.'

Our route may quite probably have been impossible when Mr. Grove so described it in 1865, but in those days ice-craft was perhaps not so highly developed as in these. Certain it is that the traverse across the face to the foot of the final precipitous slope which we had now to face was the most impressive that either Joseph or I had ever seen. As far as we could judge, it extended some 300 metres; it is, however, most difficult on snow to give exact distances, and although the Pollingers are confident that the length of the traverse is somewhat greater, it might either be a little more or a little less. Mr. Oliver, who has since been there, assures me that it is a good deal more.

The traverse is on steep snow, which was in good condition ;

in fact, the best snow of the day, but it gave us nevertheless a thrill to look round and see the tremendous slope above and the great precipice falling far below.

At the end of the traverse was something no less formidable ; the bergschrund, which in so many years effectually bars this climb. Anxiously as we looked at it, we could see only one place where it seemed possible to cross.

After a short consultation, Joseph went in front, and we cut our way down to this likely spot, which was quite near its lower and steepest end. Then Adolph again took the lead.

Adolph cut on to the lower lip and then tried to make a good step on the upper side, which was exceedingly steep. Unfortunately the snow here, where we turned upwards, was not only very steep but also extremely soft. His axe, although driven deep, did not hold, so that his first attempt failed and he slipped back on to the lower lip.

In an ordinary place this would have been nothing, but as neither Joseph nor I, situated as we were, could do anything for him, it looked quite sufficiently alarming.

Adolph, nothing daunted, tried again ; with a great effort he got across, and kicking his way up a few steps in the deep soft snow, made himself safe for me to follow. I found the same difficulty as he had encountered, but had the advantage of the support of the rope at the critical moment when I dared not pull on my axe.

Soon Adolph and I were standing together. Then we took Joseph's rope, and, giving him the same assistance, we stood at last, all three, on the upper side of the bergschrund.

We were now approaching those final séracs which we knew from observation were directly under the summit. The snow was soft and bad and very steep, the worst that we had encountered so far, but Adolph stuck doggedly to his arduous work of making good steps, well apart, and at 8.25 A.M. we stood on the top of the séracs, almost directly under the summit.

We had now been going 5 hrs. 35 mins. without a stop and were getting fatigued, especially the guides, as they had had so much step cutting. We had not been able to stop before, as on the steep slopes there was no place where we could rest.

Now as we looked up to the summit the remaining climb seemed almost perpendicular, easing off, however, towards the top, which appeared to lean back. We thought half an hour would see us up, and so we rested a quarter of an hour and ate a

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Aiguille de Bionnassay, showing R. W. Lloyd's route on July 18th, 1926.

little food. It was a short pause, as we were anxious about the snow.

We had reason; it was very bad and powdery, not at all to our liking.

And so, with great care, Adolph still leading, making good steps deep and wide apart, hay-loft ladder style, going straight up, we climbed towards the summit.

It all took time, and when we reached what we had thought the less steep place we found it almost as bad, with the snow still dangerously powdery, although not so deep, and Adolph cut through it into the ice.

By this time, however, he was obviously tired and stopped to rest when about 20 metres from the top. Being all three, in our dangerous position, very close together, I handed to Adolph the small flask of brandy I always carry in my pocket as a sovereign specific in case of emergency. He took a little and the effect was magical. Just as on our famous climb on the Dent Blanche¹ 17 years ago, when quite close to the top, his father was also tired, and I applied the same remedy—so here. It put, as Adolph said, new life into him, and he went on cutting with such renewed vigour that in a short time we were standing on the summit.

We had debouched on the exact top—without touching any arête—at 10.10 A.M., having taken 7 hrs. 20 mins. over the climb.

The N. face was so nearly vertical that, looking back, except for the last few steps, we could not see our tracks.

The summit was not quite the sort of place one would choose for a picnic; but I reflected that we were more fortunate than Mr. Grove and his friends, who groped their way to the top, straddling on the knife edge of the arête 'as sharp and delicate as the crest of a breaking wave' amid the whirling eddies of a *tourmente*, and who arrived 'so mailed in snow that they looked like uncouth statues put up there as some kind of scarecrow to prevent future trespassers from coming to such places' and could only peer into the gloom 'through the meshes of the blinding snow.'

Well, there we were; but we had to get down again, so after congratulating one another, we began to consider our descent.

To return as we had come, which was our original intention, was so clearly impossible that we did not even consider it. On the S. slope the snow was much too soft to attempt the

¹ *A.J.* 25, 452-3; 34, 104-7.

ridge to the Col de Bionnassay. There was a great deal of corniche, and to have put our trust in the steep snow below the arête would certainly have involved us in an avalanche.

The Tricot arête was also very soft and badly corniched on its S. slope, so Joseph decided to descend by the Miage arête as the only way down.

At 10.15 Joseph, his rope carefully held, stepped off the summit and proceeded to kick steps in the soft snow of the steep face towards the arête some distance below, going down face to the snow.

The snow, although soft and wet, was fairly safe, and as soon as the rope was out, I followed him, succeeded by Adolph, only one of us moving at a time.

Thus in a few minutes we reached the Miage arête, where we had a rest of about a quarter of an hour and a drink. On resuming we found that the arête we were on was cut off by a nasty couloir, so we had to make another descent of the same sort as before—very hot and fatiguing we found it—to the true arête below.

We followed this arête, all snow and easy going compared with the N. side, until we arrived at the big 'red rock ridge,' which was full of snow except over on the S. flank. Here, after some searching for the way and some complaint of the sharpness of the rocks—our hands being skinned and tender with the snow—we eventually came to rest on the last rocks above the Glacier de Bionnassay italien, and there had our first meal.

It was by this time 12 o'clock; we had been going hard for nine hours.

At 12.30 we went on again down and along the upper edge of the Glacier de Bionnassay italien, going backwards, as the snow was soft, watery and steep. Thus we turned the cut-off of the ridge and soon reached the snow arête. Then, after a glance down the couloir to see if it was possible, we went on over the arête to the Miage hut, which we reached at 1.50, having had horribly soft snow and no rock from the time we had left the 'Red Ridge.'

By this time we again needed a rest, so we stayed 25 mins., had a drink and a little food sitting on the platform looking down the Miage valley—we could not enter the hut as the door side was deep in snow and quite out of sight—and then at 2.15 proceeded down the Col de Miage. As a rule this is easy, but the rocks being full of bad snow we had to take great care and for some distance go down backwards.

51. Chalonge

Stigville de Biomassay and Carbone du Gortier

Photo-Géal, Grenoble



TO THE
LIBRARY

There was at last an end to these abominable rocks, but then more snow, horribly deep, soft, and, as Mr. Grove described it, 'flaccid.' Down this we kicked our way for an interminable time; it was 4 P.M. when we reached the Miage Glacier.

Need I describe to you that painful and intolerable weariness, the last hours of a long climb? We plodded thus along the route you all know and reached St. Gervais about 7.50. Our friend, the *Guide Chef*, was at his office; we got an automobile to Le Fayet, and never had such a drive seemed so agreeable; with 1½ hrs. to wait for the Chamonix train we had dinner at the station, and eventually walked into Couttet's at about 11 P.M.

It had been a magnificent day—one of the greatest climbs of our experience. I could not but reflect how much better we had fared than Mr. Grove and his party who were caught first by a furious storm and then by darkness at the head of the Glacier de Miage, and had to spend the night, wet through, on a couch of rocks, alternately thawing and freezing in the bitter cold.

We had made, between early morning and dark, what I think I may describe as one of the greatest snow and ice climbs in the Alps—for the first time—and let me hasten to add that it could only have been done under the leadership of a great guide such as Joseph Pollinger.

If there was another factor in our success, it was the long study entailed in our preliminary disappointments.

The day of our success in 1926 was, by a happy coincidence, the same day of the same month as the day of our defeat in 1925.

Gentlemen, I thank you for your kind attention. When I was preparing this paper I came to read the delightful narrative of the ascent of 1865. Ah, gentlemen, how willingly would I have exchanged my better fortune in the weather for Mr. Grove's felicity of style! If you have not already read his paper, there is a literary treat in store for you, and so that you may all enjoy it, we have brought a few copies here to-night. Those who do not already possess the paper may help the Club funds and give themselves pleasure by buying and reading it.

I am pleased to be able to record that on August 13, 1926, Monsieur Pierre Langlois,² with two St. Gervais guides, practically repeated the first ascent of the mountain made in 1865

² See G. H. M., *Annuaire*, 1927, p. 65.

by the W. arête. M. de Ségogne has kindly sent me a photograph with the route marked upon it.

Mr. Oliver, some days later, on August 17, with the two brothers Aufdenblatten, almost repeated my climb except that they took to the Tricot arête a few minutes from the summit and appear to have avoided the last very steep face.³

They occupied 9 hrs. on the ascent, being delayed for about an hour by a thunderstorm which broke when they were about an hour from the summit. One of the party was unwell, and this also caused delay.

They seem to have had—as might be expected later in the season—much better snow than we had in July.

On the descent they had three more severe storms with a heavy fall of hail and new snow, which rendered the Miage arête somewhat unpleasant.

Some day you may be interested to hear the story of an attempt on another mountain,⁴ which—at the moment when

³ *A.J.* 38, 310.

⁴ The reference is to the ascent of the Breithorn (Pennines) by the W. face. At the time of writing this paper I was not aware of M. Blanchet's successful climb of August 16, 1926 (*A.J.* 38, 312; G. H. M. *Annuaire*, 1927, p. 97). The following note of our attempt of July 17, 1911, may be of interest:

The party, consisting of Joseph Pollinger, Franz Imboden, and myself, left the Gandegg Hut at 02.35. Crossing the Kleinmatterhorn Glacier (S. map), we attained with some difficulty the well-marked N.W. rib of the Breithorn; this rib, very conspicuous from the hut, steepens considerably near its upper extremity, 04.00. Cutting up the rib, its culminating portion, abutting against an inclined snow plateau at the base of the mountain's W. face, was attained 06.30 (20 mins. halt). From this point bearing E., we mounted steep snow, crossed the bergschrund and then cut up a very steep snow couloir. Several times we tried the rocks to our right, S., but they were—in that hot season—impossibly smooth and polished. '1926' conditions *might* have made all the difference! Accordingly we kept to the awkward couloir, for as long as possible. Eventually we did take to the rocks on the S., which were a little more broken but with undercut holds. They brought us to a long, narrow, and horizontal crevice just below the ice cliff, here some 20 ft. high. There was no foothold whatever on the few feet between us and the ice, the rocks being rounded and smoothed like plate glass by ice friction. Further direct progress was impossible, but the cliff appearing rather lower to the S., we took to a minute ledge in the green serpentine rock and followed it with great difficulty till we could see round the corner to the S. The traverse, however, ended

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W. face of Breithorn from Kl. Matterhorn, with line showing R. W. Lloyd's route in 1911, and dotted line showing route of Monsieur Blanchet's successful ascent on 16th August, 1926.

TO THE
ABORIGINAL

success seemed assured—ended in failure, and has left a new climb yet to be done, although it may not be by Joseph Polinger and R. W. Lloyd, who do not like dangerous places!

I desire to express my indebtedness to M. Montandon for the use of some of his photographs and to Mr. Spencer and Mr. Oughton for their assistance in obtaining others for my slides.

[We are deeply grateful to Mr. Lloyd for generously defraying the entire cost of reproducing the two coloured prints and several of the photographs accompanying his paper—EDITOR.]

SOME FAMOUS PASSES.

By E. G. OLIVER.

(Read before the Alpine Club, April 5, 1927.)

THE word 'Pass' as a mountaineering term may be defined as a well-marked depression in a range of mountains. Mr. Coolidge limits the mountaineering sense to depressions which have been actually crossed by man. The passes, the crossing of which I propose to describe shortly to-night, are, of course, passes in the mountaineering sense of the word, and they all come within Mr. Coolidge's definition, though the passages by man have not been numerous. They cannot, however, be described as convenient means of access from one place to another.

When I began my mountaineering career some twenty-five years ago, passes were out of fashion—at least as first-class mountaineering expeditions. Their only advantage over peaks was that one must descend into a different valley on the opposite side of the chain to that by which one ascended; and, after all, in the popular contention, a superior result on the same lines could be obtained by traversing one's peak.

Reasoning on these lines induced me, in my earlier climbs, rather to despise passes; never to attempt difficult ones, and

in a horrid splayed-out rock and ice gully which was obviously impossible. The ice cliff here also overhung to such an extent that even if the gully had been overcome, it is doubtful if we could have reached the upper lip. Only a few yards remained, but advance being hopeless, we retraced our steps at 09.20, and, making our way most carefully down the objectionable rocks and couloir, regained the snow plateau at 10.50.

to use the easier glacier passes only as means of getting from place to place, when weather and conditions were too bad for the traverse of the big peaks.

That this was a short-sighted view, I have long since realized. Some of the classic passes may offer charms, and, indeed, difficulties (if these are desired) equal, if of a different character, to those to be found on any peak.

I think I do not delude myself in believing that my cult of passes in recent years at the expense of peaks, is not only due to declining energy and diminished physical powers, but also to the merits of passes themselves as Alpine expeditions.

The four passes I propose to deal with to-night are the Col du Mont Dolent, the Col du Tour Noir, the Col du Lion and the Jungfraujoch. Each of these will, I think, be generally admitted to be a first-class mountaineering expedition ; and each has an interesting mountaineering history.

THE COL DU MONT DOLENT.

This pass is situated between Mont Dolent and the Aiguille de Triolet, or, more exactly, between the Pointe de Pré de Bar and the Pointe du Domino, at the head of the Argentièrre Glacier, and was crossed for the first time on June 26, 1865, by Mr. Edward Whymper with Christian Almer, Michel Croz and Franz Biener. On the Val Ferret (Italian) side of the pass in ordinary circumstances, no serious difficulties occur ; but on the Argentièrre side it is necessary to surmount a steep ice couloir at an angle of about 50° , while the bergschrund may be extremely troublesome. The height of the col above the head of the Argentièrre glacier is about 1200 ft. Whymper's party crossed from the Italian side and descended the couloir, using, however, the rocks on the right bank to a considerable extent. They took 7 hrs. to descend to the glacier, and the descent is famous among the many great ice climbs accomplished under the leadership of Christian Almer. The whole expedition from Courmayeur to Chamonix occupied 23 hrs.

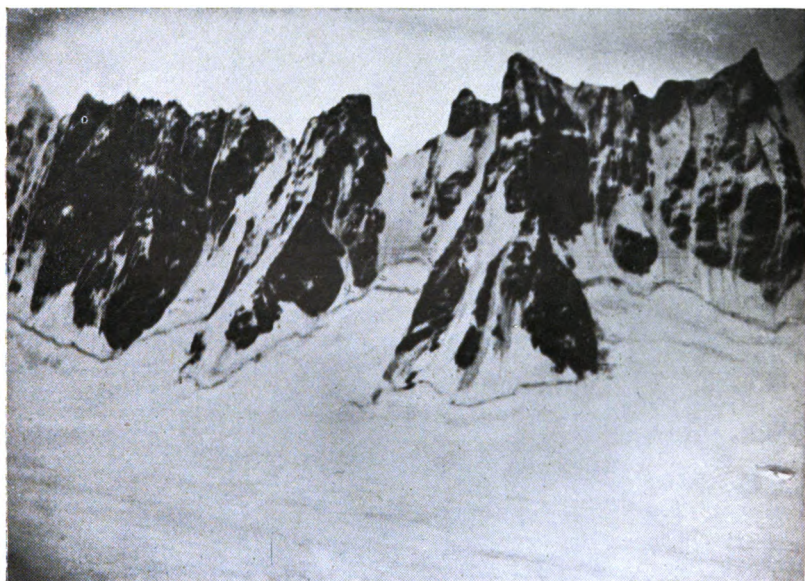
No one has yet repeated Whymper's passage in the same direction ; but the col has been several times crossed from the Argentièrre side. Captain Farrar has been kind enough to supply me with a list of these expeditions so far as they are known to him, which are as follows :

2nd. Sir W. E. Davidson and Mr. J. W. Hartley with L. Lanier and J. Jaun, September 1, 1878.



Phot. E. G. Oliver.

ON THE ACTUAL WATERSHED
OF THE COL DOLENT.



Phot. E. G. Oliver.

COL DOLENT FROM GLACIER D'ARGENTIERE.



OLLIER, cutting over BERGSCHRUND
on COL DOLENT.
(Black shadow on left is the back of CROUX.)



Phot. E. G. Oliver.

3rd. Herr C. Gruber with Emile Rey and J. von Bergen, July 1881.

4th. Messrs. E. A. Broome and P. L. Pryor with J. M. Biener and A. Imboden, August 5, 1898.

5th. Signor E. J. Mazzuchi with César Ollier and Joseph Croux, July 18, 1903.

6th. Signor Cajrati-Crivelli with Laurent Croux and Alexis Brocherel, August 13, 1904.

If this list is complete, our crossing was the seventh ; and I have not heard that the expedition has been repeated since. I had accepted an invitation to join some Italian friends at Courmayeur, and had no expectation of doing any climbing, beyond, perhaps, a little walking exploration with a view to future expeditions. But, on arriving at Courmayeur, I found, to my surprise, that some climbing would be possible. My old friend, Henri Rey, was at large, and only too anxious to accept engagements. After doing a few expeditions with my Italian friends, I engaged Henri Rey and Alexis Brocherel, with the intention of doing some rock climbing on the Chamonix side of the chain. We climbed the Grandes Jorasses, and then crossed the Col du Géant to Plan de l'Aiguille. Glacier conditions were the worst I ever encountered ; we had considerable difficulty with the Planpansière glacier on our ascent of the Grandes Jorasses, and were, consequently, nearly benighted. When we crossed the Col du Géant, we had intended to take the Dent du Requin on the way down ; but found it impossible, in spite of repeated attempts, to get to the foot of it. Afterwards we actually took 6 hrs. to descend the séracs, and arrived at Plan de l'Aiguille at about 9 at night. Here the weather turned bad, so we resolved to return to Courmayeur by one of the more difficult passes, and selected the Col du Mont Dolent. On August 23 we walked up to the Cabane du Jardin d'Argentière, from which we intended to make our start.

Arrived at the upper plateau of the glacier, we had ample opportunity, as we walked along, to observe the aspect of our climb. I was aware that Sir E. Davidson's party in 1878 had succeeded in reaching the col in 2 hrs. from below the bergschrund, by taking to the rocks on the right of the couloir. Brocherel told me that he had crossed the pass with Signor Cajrati in 1904 without any particular trouble by the same route. Nevertheless, it was evident that an ascent by these rocks was going to cause formidable difficulties ; they were thickly plastered with snow. On the other hand the couloir

looked as repulsive as possible, being almost entirely composed of something as near black ice as anything I ever saw. Arrived at the hut, however, and fortified by a good meal, our spirits rose ; and we jested and made wagers as to the number of hours we should sleep in the woods on the other side, awaiting the arrival of the carriage, which we had ordered to meet us at 3 p.m. Next morning we were off at 5 (French time), and got to the foot of the bergschrund at 7.10. On the way we discussed the route. Rey and I were for the couloir, using the rocks on the right side as much as possible. But Brocherel, who had the advantage of having done the climb before, pleaded for the rocks, informing us that once over the bergschrund we should have no serious difficulty, and that a little snow more or less need not be feared. His argument, fortified by his previous experience, eventually carried the day, and we started to surmount the bergschrund. Here we had a formidable task ; the fissure was completely filled with frozen snow, so that the floor afforded a safe foothold, but the wall was high and steep, and the upper lip overhung at a height of perhaps 30 ft. above our heads. Brocherel started to cut up, bearing to the right, and then, gradually, to the left, and Rey followed him till both were over the top, almost directly above where I stood, and quite out of sight.

When they shouted, I followed ; but at the first step I found that they had not left me enough rope, as I had to traverse considerably to the right and away from them. I shouted and pulled the rope. The guides above me, who could not see, misunderstood, and, supposing I had slipped, pulled hard on the rope, with the result that they swung me out of my step, and I found myself in a truly ridiculous position, suspended by the rope, though just able to touch the floor of the bergschrund with my toes ; there was an overhanging ice-wall above me, and I was unable to hold anything either with ice axe or hand. It seemed quite an appreciable time before my shouts made them understand that I wanted more rope. But at last they let go, and I stood again on firm ground. I now followed in the steps, and at 9 a.m. we stood together above the bergschrund, which had taken us nearly 2 hrs. to surmount.

Above the bergschrund we found snow, and Brocherel rapidly made steps up to the nearest point of the rocks, where we changed our order, Rey taking the lead and Brocherel going last. The first few steps of the rocks were not difficult, in spite of new snow on them, and we made rapid progress. After climbing about 100 metres, however, we began to en-

counter serious difficulties, as the rocks were plastered with caked frozen snow. Rey had the greatest difficulty in cutting holds, and in placing his hands and feet, and could not find any place for a firm stand to hold the rope. He shouted to me again and again that he was not safe, and warned me to be extra careful. Yet there was no option but to proceed in this somewhat hazardous fashion.

Once or twice Brocherel and I unroped, and changed places, but Rey continued to lead. From time to time Brocherel or I gave him a shoulder. As we ascended, he was driven more and more to the left against the rocks of the *Pointe de Pré de Bar*, which, being steeper, held less snow and ice. These rocks, however, proved impracticable a little higher, and we skirted under them, traversing eventually to the right over exposed slabs covered with snow and ice, until we reached a corner not far from the main couloir, whence a slanting subsidiary couloir led upwards to our left, above which the rocks looked less difficult. It was now 4 P.M. The rocks directly above us were covered with verglas, and we were faced with the alternatives of going into the main couloir, where we expected to find hard black ice, or of trying the slanting couloir to our left. We decided on the latter course, and reversed our order, Brocherel again leading. An hour's step cutting in ice brought us to the top of this couloir ; but, arrived on the rocks, we again found difficulties at least equal to those experienced below. The rocks were very steep, and covered with verglas. At length, after two more hours of very arduous climbing, we found ourselves on the summit ridge, considerably above the col.

The point at which we arrived appears to be the lower point of the *Pointe de Pré de Bar* (Point 3614 m.), which was first climbed from the *Argentière* side by M. Emile Fontaine with Jean and Joseph Ravanel in 1904.

Hence we descended to the col in half an hour, over very steep rocks, but carrying less snow and verglas. We reached the col at 7.30 P.M., having taken 12 hrs. 20 mins. from the *bergschrund*. We started immediately to descend the Italian side in the fading light, and reached the last rocks above the *bergschrund* at 9.15.

We had been climbing for 15 hrs. without a halt of any kind ; we had had nothing to drink, and nothing to eat except some chocolates and prunes in our pockets. Our feet were wet through. We immediately changed our stockings and sat down to a hearty meal. My spirits revived at the thought of the difficulties past, and especially at the sight of a glorious full

moon now rising, which was going to save us from a cold and miserable bivouac.

At 10.15 we were on foot again, but, to our great disappointment, found the bergschrund (which I understand is, on this side, generally easy) very high and a mass of ice. It took $2\frac{1}{2}$ hrs. of step-cutting to cross this bergschrund and reach the level part of the Pré de Bar Glacier (12.45 A.M.).

From here we made our way without further difficulty to the Col Ferret, and thence to La Vachey, which we reached at 5.20 A.M. (Italian time), after nearly $22\frac{1}{2}$ hrs. going. Naturally our carriage had not waited for us, so we turned in—gladly as far as I was concerned—and slept till midday.

Thus ended the most difficult expedition in which I have taken part. The conditions, however, were undoubtedly exceptionally severe; and the experience of other parties proves that, given reasonably dry rocks, this pass need be feared by no competent party in fine weather. Indeed Mr. Broome's party took only $4\frac{1}{2}$ hrs. from the bergschrund to the pass, although they found the rocks covered with deep snow.

THE COL DU TOUR NOIR.

This Pass is situated between the Aiguille d'Argentière and the Aiguille de la Neuvaz; the Tour Noir standing beyond and to the E. of the Aiguille de la Neuvaz.

The first passage was made on July 22, 1863, by Messrs. H. B. George and R. J. S. Macdonald, accompanied by the famous guides Christian Almer and Melchior Anderegg.

This party had no intention whatever of trying a new and difficult route, and started from Argentière with the object of passing over the Col d'Argentière, which had been traversed for the first time two years before. It seems extraordinary, if one looks at a present-day map, that such a geographical mistake as they made should have occurred. The Col d'Argentière runs roughly E. and W. The Col du Tour Noir runs roughly N. and S. To reach the Col du Tour Noir from the Argentière side, one must take the Glacier des Améthystes, while for the Col d'Argentière it is necessary to go up the Glacier du Tour Noir. Moreover, on the Swiss side, the Col du Tour Noir leads one down on to the Saleinaz Glacier, while the descent from the Col d'Argentière is made by the Glacier de la Neuvaz.

It is clear, however, from Mr. George's admirable account of the expedition that the maps available in 1863 were hope-

lessly inaccurate regarding this region; and he speaks of a 'No Man's Land' then supposed to exist at the junction of the Argentière, Tour and Saleinaz glaciers, claiming that his party had, by their expedition, settled a long debated geographical question.

This strong party left Argentière at 2 A.M., and going up the Argentière Glacier turned to the left up the Glacier des Améthystes, by mistake for the Glacier du Tour Noir.

They reached the Col du Tour Noir after 4½ hrs. walking, being under the impression that they stood on the Col d'Argentière, and that they were looking down on the Glacier de la Neuvaz instead of the Glacier de Saleinaz.

The two guides examined the wall down which their descent must be made, and they found it very ugly, though they seem to have had no doubt that they were on the right pass. Fortified, no doubt, by the reflection that they could do what others had done, they decided on the descent. This was long, difficult and dangerous, and its successful accomplishment is recognized as one of the greatest feats of step-cutting accomplished even by Christian Almer, one of the greatest mountaineers who ever lived. They took 6½ hrs. to reach the glacier, and becoming involved in a maze of séracs lower down on the Saleinaz Glacier, they were obliged to spend the night on some rocks in a sort of cave formed by the glacier. Here they found fair shelter against the wind and rain, which fell intermittently through the night. At 3.30 next morning they started again, and reached Orsières at 9—31½ hrs. after their departure from Argentière.

I can find no record of other parties having visited this pass during the next twenty-five years; but on August 11, 1888, MM. Albert Barbey and Louis Kurz, with Justin Bessard and Joseph Simond, went to the pass by the easy route up the Glacier des Améthystes for the purpose of an ascent of the Aiguille de la Neuvaz. M. Kurz states that it was on this occasion that M. Barbey formed the extraordinary idea of proposing the Col du Tour Noir as a suitable expedition for a 'Course de Section' of the Diablerets section of the Swiss Alpine Club, but in the opposite direction to that accomplished by Mr. George's party. This suggestion, emanating from such an authoritative source, was duly carried into effect; and on July 26, 1890, 17 members of the section, accompanied by numerous guides and porters, duly arrived at the Cabane d'Orny. It was agreed, however, that only the boldest should attempt the passage of the Col du Tour Noir, and that the rest

should proceed to Argentière by means of the Fenêtre de Saleinaz and the Col du Chardonnet.

The climbing party for the Col du Tour Noir eventually reduced itself to Messrs. H. G. Fordham and Jean Jaccottet, with the guides Justin Bessard and Henri Aulet and a porter, Joseph Bessard. They left the Orny hut at 2 A.M. on July 27, 1890, with fine weather and good snow, and passing the Fenêtre de Saleinaz arrived at the foot of the wall at 5.30. From here they took 6½ hrs. to the col, just the same time as the first party had employed in the descent. They used the rocks as much as possible, but had a great deal of step-cutting, especially on the upper part, where they found hard ice. They reached the col a little to the west of the lowest depression, and descended without difficulty by the Glacier des Améthystes and the Argentière Glacier to Lognan, where they rejoined their friends from the Col du Chardonnet.

The idea of attempting to repeat this expedition was suggested to me by Captain Farrar, and finding it possible to get away for a few days' holiday at Whitsuntide, 1925, I joined my guides Adolf and Alfred Aufdenblatten at Martigny, and, after a preliminary walk, we proceeded straight to the Saleinaz hut as the most convenient starting place. We spent two nights in the hut; but, though the weather was fine, the nights were warm, and the snow conditions much too bad to make the attempt possible. We were obliged, therefore, to return to Orsières without even trying the climb.

In August 1925, with the same men, I resumed the attempt, and again went to the Saleinaz hut from Chamonix over the Col du Chardonnet, and spent a night there. We left the hut in splendid weather, and arrived at the foot of the wall, which we found on this occasion a mass of hard ice. We spent several hours in forcing passages over the bergschrund, trying two or three different places in the hope of finding snow above; but it became apparent that the whole wall was hard ice, some 400 metres in height, and that we should have a slender chance of accomplishing the ascent without a forced bivouac. We reluctantly decided, therefore, to await more favourable conditions, and returned to Chamonix again over the Col du Chardonnet.

In 1926 the snow conditions appeared more favourable, and on August 1 we again went to the Saleinaz hut. We had intended to start at 3.30 next morning, but the custodian forgot to call us, with the result that we eventually started at 5.30, two hours late. We made rapid progress up the Saleinaz

Glacier, which was much less crevassed than in 1925, and reached the foot of the wall at 7.10. Here we halted for breakfast and to put on crampons, and actually started the ascent at 8.5. It was arranged that Alfred should lead, reserving Adolf for the upper part, where we expected to find more ice. We crossed the bergschrund without much difficulty to the right of the largest mass of rocks, which projects from the wall below the col; then, traversing to the left, got on to these rocks at nine o'clock. We then went straight up the right-hand side of these rocks, which alternated with snow. At 9.40, as we were leaving the rocks to cross a patch of snow, Adolf suddenly discovered that he had lost his ice axe, and the two guides returned to look for it. Eventually they found it at the bottom of the rocks. As a result of this misadventure and of the desire of all the party for further refreshment, I enjoyed a rest of a full hour from 9.40 to 10.40, with a magnificent view over the Saleinaz Glacier and the surrounding amphitheatre of mountains.

At 10.40 we started again, using the rocks as much as possible, until they came to an end, merging in the snow slope. Hence we continued straight up the snow, using a few rocks which jutted out here and there; and arrived on the summit ridge just above and to the right (west) of the col at 12.50, at about the same place as that reached by the 1890 party. There was more ice near the top, and we had had to cut occasional steps in hard ice lower down, but altogether I estimate that we had not more than perhaps twenty steps in hard ice. At no time, however, were we able to kick steps, so steps had to be cut all the way, except where we were able to use the rocks. Alfred led throughout.

Judging by times, our conditions must have been very favourable. Deducting half an hour, a fair allowance, for the time lost in retrieving Adolf's ice axe, the wall took us $4\frac{1}{4}$ hrs. only, against $6\frac{1}{2}$ hrs. employed by each of the two previous parties. The slope is certainly steep, perhaps 55° on an average.

After a halt of rather over an hour we started down at 2 P.M., and finding few crevasses either on the Glacier des Améthystes or the Argentière Glacier, we reached Lognan at 3.45, well content with the day's work. We had taken only $1\frac{3}{4}$ hrs. from the top of the col.

The name Col du Tour Noir is possibly not a very appropriate name for this pass. I see that M. Kurz, in an article in the *Echo* for 1888, proposed the name Col des Améthystes, reserving

the name Col du Tour Noir for the gap between the Tour Noir and the Aiguille de la Neuvaz, now called the Col Supérieur du Tour Noir. But the older name is now too well established in classical mountaineering literature for any change to be made.

Questions have been raised as to the gender of the word 'Tour' in this district. Mr. George called the pass 'Col de la Tour Noire,' on the ground that the feminine gender signifying a tower seemed more descriptive of the appearance of the peak; and because he seems to have thought that Chamonix people spoke of 'La Tour Noire,' although I can find no other authority for this. The masculine form occurs on the old maps, and also in the village Le Tour, and in Glacier du Tour, Aiguille du Tour, etc. Mr. George complains that he can find no significance in the masculine form; but the word means, amongst other things, a revolving cylindrical box of the kind used in monasteries for the purpose of passing articles in and out; or a round of cheese shaped like an ordinary Stilton. Possibly this sense may account for the origin of the use of the masculine form. In any case, it is used in all the modern maps, and members of the G.H.M. with whom I have discussed the question tell me that the masculine form is undoubtedly correct.

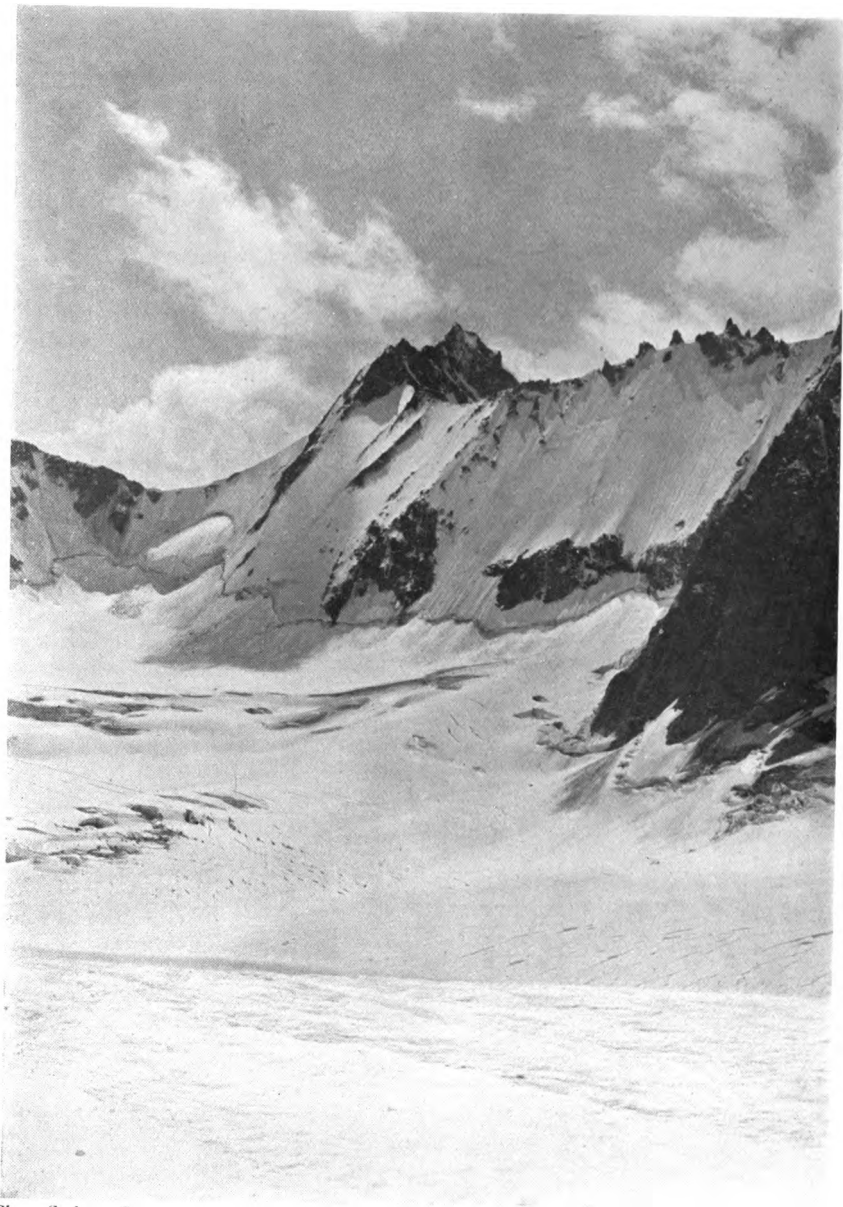
THE COL DU LION.

Situated as everybody knows between the Matterhorn and the Tête du Lion, this pass has been crossed altogether on five occasions, four times from Zermatt to Breuil, and once in the reverse direction. The recorded impressions, except my own, appear to be unanimously unfavourable; yet I am unrepentant in considering this expedition, in the condition in which we found it, not only quite justifiable and safe, but also one of the most enjoyable in which I have ever participated.

In August 1923 I was in Zermatt with Adolf and Alfred Aufdenblatten, and discussed with Adolf the possibility of making this passage in comparative comfort and safety. We both agreed that, given fine weather and good snow conditions early in the season, there was no reason why an attempt should not be made.

Whitsun fell late in 1924 and seemed to give us the required opportunity, as I was able to get away from London for the short vacation.

Before I left London Adolf wrote to me that he had examined the couloir from the distance and thought it would go. He



Phot. Sydney Spencer.

COL DU TOUR NOIR.



Phot. Lorria and Eckenstein Series.

COL DU LION.

reported that there was no corniche at the top (one of the chief dangers to be feared), though he had not been to the foot of the couloir to see whether there had been stone falls. I therefore decided to make the attempt.

The following previous ascents appear to have been made :

1st. Mr. A. F. Mummery with Alexander Burgener, July 6, 1880, from Zermatt to Breuil.

2nd. Dr. Paul Güssfeldt with Alexander Burgener, July 2-3, 1881, *Breuil* to Zermatt.

This party found ice at the top of the couloir, where Mummery the previous year had found snow; but they used a wooden stake, looping 200 ft. round it to minimize the step-cutting. Lower down the snow was in a better condition; but they were exposed to volleys of stones, which continued intermittently all night, being compelled to spend the night in an insecure position on a projecting rock on the right of the couloir, just where it bends, both having been badly hit. Thence they managed to descend to the Tiefenmatten Glacier next morning.

3rd. Herr Moritz von Kuffner with Alexander Burgener and Aloïs Kalbermatten about 1891.

4th. Mr. W. M. Baker with Aloïs Pollinger and his sons Josef and Heinrich Pollinger on July 16, 1900.¹

¹ [The following is an extract from a letter from Mr. Baker, dated March 5, 1926 :

‘ You ask me for notes of my crossing of the Col du Lion with the three Pollingers on July 16, 1900. As it is a quarter of a century ago, my recollection of it is not very clear, but I will tell you what I can. We started a little before midnight from the Staffel Alp and went up to a flat glacier plateau immediately under the S.W. arête of the Matterhorn—considerably further E. than the part of the Tiefenmatten Gletscher you and I crossed on our way to the Col Tournanche (June 22, 1906). Here we roped at 03.00 and crossed to the foot of the couloir, which we reached at 03.30. Breakfast. Started up couloir, 04.00. Reached col, 09.30. In the lower part of the couloir all parties must go practically the same way [Oliver does not agree and states “ on the contrary, if we had found snow instead of ice, we should have certainly made straight for the narrow part of the couloir which we joined afterwards above the rocks and without touching the rocks in the lower part ”], but in the last bit below the col, there is a snow wall which Burgener went up. The old man [A. P.] who was leading at the time, kept cutting across to it but would not trust it; consequently we were driven away to the left and concluded the

Another expedition here deserves mention. On August 7, 1881, the late Mr. J. H. Wicks, with Ambrose Supersax and Theodor Andenmatten, started for the Col du Lion. Arrived at the foot of the couloir, they found stones whizzing down. They therefore took to the rocks of the Tête, which they reached by cutting up an ice wall exposed to falling stones. They then climbed the rocks of the Tête, which were very insecure; and reached the summit ridge about 100 yards to the W.—that is, on the Dent d'Hérens side of the Tête. They employed $7\frac{1}{2}$ hrs. from the foot of the couloir to the top of the Tête.

I arrived in Zermatt in bad weather, but on Whit Monday, June 9, the weather cleared and we decided to start. Spending the night at the Schönbühl hut, we left at 1.30 A.M., and crossing the Z'mutt Glacier, and passing close to the bivouac place for the Z'mutt arête descended to the Tiefenmatten Glacier and reached the foot of the couloir below the bergschrund at 4.20. Here we were delighted to find that not a single stone was to be seen on

climb over rocks—very bad but not *very* steep—otherwise they would have been impossible.

'We started again at 11.00 and halted at 12.20—I think at the spot where we ceased to go down and turned up towards the Furggenjoch. At any rate, we went on at 12.55 and reached the Furggenjoch at 14.20. Halted till 15.30. Unroped 16.20. Schwarzsee 17.00 and Zermatt 18.15.

'The principal items of "interest" were the rocks which fell on us shortly before the sort of shoulder where the couloir curves and where the old man changed places with Josef. All the top part of the couloir, he cut enormous steps, very far apart, so that I had to turn round and haul Heinrich from one step to another—his legs being short. . . . (Signed) 'W. M. Baker.'

With regard to Mr. Oliver's account (*A.J.* 36, 372-5), Mr. Baker adds in a note dated March 16, 1927: 'The sun did not shine on the couloir till midday—quite right—we had noticed that from Col Durand and Dent Blanche in 1899. But the stones did *not* fall from the couloir, but from the Tête du Lion, and the sun gets on to that quite early . . . there is not much choice of routes cutting up an ice couloir. As I have said, the couloir is always ice. If it was snow it would avalanche. . . . Coolidge compared it with his Col des Avalanches, which, I believe, has not been repeated.'

Personally, we should prefer to compare the Col du Lion with the Colle del Badile, but the crossing of the latter, if less dangerous, is a much longer expedition.

Whatever may be the attractions of this gloomy and precipitous couloir as a 'climb,' the dangers, which are continuous, do little to warrant the expedition as a justifiable one.—EDITOR.]

the snow below the bergschrund. The sun could not touch the couloir before midday. We therefore felt confident of a safe passage.

While we were putting on our crampons I had a good look at the route. From the place where we stood I could not see all the way to the col, as there is a sharp bend about half-way up the couloir. But I was surprised to find how much broader the couloir really is than it had appeared to be from various points on the surrounding mountains from which I had previously observed it. It takes a shape rather like that of an hour-glass, broad at the top, if we include in the breadth two or three ribs of rock which project from the ice and snow, while the lower part spreads out like a fan to join the slopes below the Matterhorn and Tête du Lion. One does not really enter the couloir until considerably above the bergschrund. The middle section is much narrower, and is reduced to two narrow ribbons of snow or ice, with rock jutting out between them. Still, even here, the couloir is broader than I had believed to be the case.

I had Mummery's account in my mind; and, though it is somewhat difficult to follow, he seems to have started over the bergschrund to the left—that is towards the Matterhorn—making almost straight for the narrow part of the couloir. On this occasion, however, we found the lower part ice; so we decided to start to the right on the Tête du Lion side, and make for some rocks which descend from the Tête du Lion above which it appeared that we should be able to traverse back into the couloir. The bergschrund gave us no trouble and could have been crossed almost anywhere; but above we found bad ice; and, Adolf leading, it took us 2 hrs. to get to the rocks, which we found cold and slabby, but not extraordinarily steep.

After scrambling up two or three steps of these rocks we were fortunate enough to find snow above; we then traversed to the left over snow and easy rocks into the couloir, which we rejoined rather below the narrow part. The success of the expedition now depended upon whether we should find snow or ice. If it were all ice to the top we could never get up in a day. But to our great good fortune, crossing to the Matterhorn side of the couloir and keeping close to the rocks we found here snow, and were able to proceed rapidly without much cutting. By 9 we had rounded the bend in the couloir, and stopped near some rocks on the Matterhorn side of the couloir in full view of the col, which looked quite near—not more than an hour away at most. Here, however, we encountered a disappointment, and events proved that the hardest part of the task

remained to be fulfilled. The upper part of the couloir is divided into two strips of snow or ice divided by a rib of rocks hardly emerging from the ice, quite useless for climbing in existing conditions. We were now in the strip nearest the Matterhorn side, and it was soon evident that this was all hard ice to the top of the pass.

Although Alfred worked hard, we were able to proceed only very slowly. We kept as close as possible to the rocks on our left, but could get no holds on them, so that every step had to be cut in ice. After three-quarters of an hour of very slow progress, I suggested to Adolf that we should bear to the right across the nearest strip of the couloir on the edge of which we were moving, and try a rib of what appeared to be snow, which led upwards on the near side of the above-mentioned rocks running down the middle of the couloir. He agreed, and, taking the lead himself, cut straight across the left strip of the couloir in very hard ice. Arrived on the rib, we found snow as we hoped ; but at the top of it we were again forced to the left into the left strip of the couloir, with nothing but hard ice between us and the col. It was now nearly 11, and the last two hours seemed to have brought us very little nearer our goal. We determined, therefore, to try the rocks to our left on the Matterhorn side. Two or three steps enabled us to cross the strip of ice between us and the rocks, which was here narrower than lower down, and Alfred was sent on ahead. These rocks were difficult, being smooth and slippery, with practically no hold. Alfred advanced the full length of the rope, and it was evident from his movements, and from the time he took, that the place was difficult. I unroped to give him more room ; and when about 100 ft. of rope had run out, he shouted that he was at the top of the rocks. Adolf now tied on and followed, leaving me last ; but the rope between Adolf and me being too short, we spent some uncomfortable and anxious minutes alternately scrambling and attempting to stand on smooth and slippery slabs, without any apparent hold, and so cold that I found great difficulty in keeping any sensation in my fingers. Our crampons here were much in the way. Alfred was unable to get a good enough stand to help us much, and for my part, I felt a sense of relief when we emerged above the rocks on an ice slope not far from the col. From here, a few steps in hard ice, with an occasional hold on a rock, brought us to the top of the pass, right above the middle of the couloir and at the lowest point of the summit ridge.

Here, after consuming a bottle of champagne and various

provisions, we basked in glorious sunshine for two hours. We had not felt a touch of sun before reaching the top. During the whole ascent we had neither seen nor heard a single falling stone.

The descent to Breuil was easy; but a native who asked Adolf what we had done, refused to believe him, and said that we had done the Col Tournanche; adding that only Burgener could do the Col du Lion. Thus is the memory of that great guide still preserved in the Valtournanche.

After this encounter we made our way to the Hotel des Jumeaux—at Giomein—as the larger upper hotel was not yet open—and there received a hearty welcome from Aimé Maquignaz, the genial host, who soon produced some good champagne. Our host, besides being a good raconteur, proved himself a convivial companion, and with his able assistance several bottles of his excellent liquor disappeared during the course of the evening.

Next morning we returned to Zermatt over the Furggenjoch, delighted with the success of our expedition; and the weather turning bad I returned to England without attempting to capture any more scalps. We had had the good fortune to select the only possible day for the climb.

THE JUNGFRAUJOCH.

This famous pass was, as all the world knows, first crossed, July 21, 1862, by Sir Leslie Stephen, Messrs. H. B. George, A. W. Moore, J. F. Hardy, H. A. Morgan, and R. Livesey with six Oberland guides, headed by Christian Almer; and probably everybody in the room is familiar with Leslie Stephen's classic description of the ascent in the 'Playground of Europe.' They occupied 9 hrs. from the Wengern Alp to the top of the pass.

Undoubtedly the passage has been made many times since; and I have made no attempt to collect a complete record of expeditions. It seems clear, however, that, in the days of the pioneers, passages were more frequent than they have been in recent years.

As far as the plateau between the second and third ice falls, the route from the Wengern side is the same as that for the N. face of the Jungfrau by the Silberlücke; and from this plateau there are two alternative routes which may be adopted, according to the snow conditions. The route more generally followed leads straight up to the pass through the séracs of the Kühlaunen Glacier; the other route is up a steep wall to the

right, much nearer to the Jungfrau. The second route is steeper, but comparatively free from séracs and crevasses.

The first party followed the left-hand route, and a ladder was used to surmount the worst of the crevasses.

The second passage appears to have been made on August 8, 1863, by Messrs. Jacomb and Rennison with the two Michels, Christian Bohren and Peter Bernet, all of Grindelwald. On August 16, 1864, Messrs. Hornby and Philpot with Christian Almer, Christian Lauener, and J. Bischof, using ladders, *descended* from the Jungfrauoch on the N. side, a feat which was repeated in 1873 by Mr. Coolidge, Miss Brevoort and the dog Tschingel, led again by Christian Almer.

Other passages recorded in the ALPINE JOURNAL are those of Herr Andreas Fischer with Johann Kaufmann the younger on July 8, 1894, and Mr. F. W. Balston with Peter Inäbnit and Fritz Steuri on July 31, 1908.

Herr Fischer's party found considerable difficulties on their ascent, and stated that the pass had not been reached on that side for several years.

Each of these parties took the left-hand route, Herr Fischer's party occupying 8 hrs., and Mr. Balston's party 6 hrs. over the ascent.

In Dr. Dübi's 'Climbers' Guide to the Bernese Oberland,' mention is made of an ascent by him in 1878, which occupied $7\frac{1}{2}$ hrs. from the Guggi Hut; and of another ascent by MM. Louis Kurz and Victor Attinger, which took only $3\frac{1}{4}$ hrs. The last seems to be the fastest time recorded; and it appears probable the ascents were made in each case by the left-hand route. Captain Farrar informs me that the pass was crossed in 1872 by Mr. F. J. Church with Joh. v. Bergen, and doubtless a second man, as mentioned in von Bergen's 'Führerbuch.' No details appear to have been published.

Evidently the time required for an expedition of this character and the difficulties met with must vary enormously in different seasons; but it is probable, on the whole, that one will have an easier passage early in the season, before the crevasses have opened to the widest extent and the snow on the steep slopes has turned to ice. It was with this idea that, in May 1925, after our failure on the Col du Tour Noir, we went to Grindelwald to make the attempt.

We left the Guggi Hut in magnificent weather at 4 A.M.; and descending the villainous couloir that leads down to the Guggi Glacier, which was, on this occasion, much encumbered with snow, took the ordinary route for the N. face of the

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Phot. F. S. Smythe.

A CREVASSE BELOW THE BERGLI.

Jungfrau, threading our way through the middle ice-fall without meeting any particular difficulties, to reach the nearly level plateau between the upper and middle ice-falls at 7.15. From here we knew there were two alternative routes. Previous examination from the hut had induced us to think that the left-hand route was feasible; but, from where we stood, we could not see right up to the top; while it was manifest that the wall to the right must be practicable, though the route would be steeper and longer. We therefore decided wisely, as it afterwards appeared, to take the right-hand route, and make certain of our climb.

We started at 7.45, Alfred leading, and at first made rapid progress, being actually able to kick steps in fairly good snow. When we were rather more than half-way up the wall, however, we encountered hard ice and Adolf relieved Alfred in the lead. We had $2\frac{1}{2}$ hrs. of hard step-cutting before we emerged at 10.50 on the gentle slopes above the wall. The last piece, which included working round a huge overhanging bulge of ice, was quite sensational. As we were passing the steepest part of the ascent, an Italian aeroplane passed directly over us; and I remember the difficulty of concentrating on standing firmly in the steps while, at the same time, watching the progress of the adventurous aeronauts, who must have crossed very close to the top of the pass. Above the wall we found bad snow, and, sinking in deeply at every step, we emerged on the summit ridge just to the west of the Pic Mathilde, which we traversed to the col, where we arrived at twelve o'clock.

We had estimated 5 hrs. for the ascent, and had actually taken 8 hrs.; but we had not reckoned on finding so much ice. From above the ice wall we looked down on the alternative left-hand route, which appeared to be barred by an enormous crevasse running right across it. It would seem that this crevasse is often present. The first party used a ladder to pass it, as also did Messrs. Hornby and Philpott on their descent in 1864.

The first ascent by the wall seems to have been that of Messrs. Jacomb and Rennison in 1863, mentioned above; but their account unfortunately does not give the time occupied in the ascent. I have not come across any other account of this route, although I fancy it must have been followed by other parties.

I desire to record my grateful thanks to Captain Farrar, Mr. Spencer, and Captain Finch for kindly providing photographs and lantern slides for this paper.

CLIMBS IN THE FORBES-LYELL AND OTHER GROUPS OF THE
CANADIAN ROCKIES, 1926.

BY J. MONROE THORINGTON, M.D.

Who has known heights, shall bear for evermore
 An incommunicable thing
 That hurts his heart, as if a wing
 Beat at the portal challenging ;
 And yet—lured by the gleam his vision wore—
 Who once has trodden stars seeks peace no more.

MARY BRENT WHITESIDE.

ON the evening of September 10, 1858, Dr. Hector, physician and explorer of the Palliser Expedition, encamped at the Saskatchewan Forks, observed a comet, and, during the night, heard a great noise, like distant thunder, at intervals, which his Indian hunter said was caused by ice falling in the mountains. Three days later, in the Glacier Lake valley, he discovered and visited the Lyell icefield.

The star was of good omen ; for, since that day, the sources of the North Saskatchewan have become a playground, although the remote upper fastnesses are even now known only to a small group of mountaineers. This is especially true of the Glacier Lake country, a little off the main through trails ; and when, in the summer of 1926, we—Dr. Max Strumia, Mr. Alfred Ostheimer (III.), Edward Feuz, and myself—joined forces to visit the region, we could gain but little information from our predecessors.

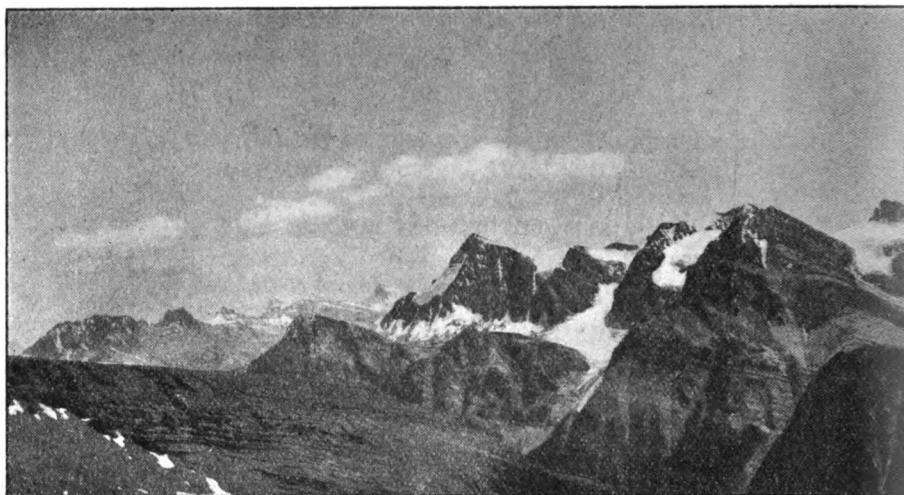
The late Sir James Outram, with Christian Kaufmann, in 1902 ascended Peak 2 of Mt. Lyell from Alexandra River, and the present Mons Peak from the valley of Glacier Lake,¹ shortly afterwards joining Dr. Collie and his companions in the ascent of Mt. Forbes from the S.² Collie and his party then came to Glacier Lake, reaching the icefield but doing no extensive climbing. The Interprovincial Survey, in 1918, reascended

¹ *In the Heart of the Canadian Rockies*, Outram (Macmillan, 1905), pp. 311 ff., 388 ff. *A.J.* 21, 338.

² *Climbs and Exploration in the Canadian Rockies*, Collie and Stutfield (Longmans & Co., 1902), p. 273 ff. *A.J.* 21, 370.

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1 2 3 4 5



9

10



PANORAMA OF
from above

1 Sarbach, 2 Kaufmann, 3 Cephren, 4 Howse, 5 Outram, 6 Forbes,



LYELL ICEFIELD
Glacier Lake.

Mons Icefield, 8 Lyell Glacier, 9 Bush, 10 Lyell Icefield, 11 Lyell Massif.

to vml
gghhlllo

Mons Peak ³; while, in 1920, Dr. J. W. A. Hickson, with Edward Feuz, repeated the ascent of Mt. Forbes.⁴

To us, the peaks of Lyell, affording the most compact group of high unclimbed summits left in the Canadian Rockies, together with the proximity of Mt. Forbes, were inducement enough to make the region the goal of a summer's holiday. We arranged with Jim Simpson, with whom I had already visited the Freshfield and Columbia icefields,⁵ to outfit us and guide the pack-train.

Bow Valley, on the evening before our departure, was gorgeously coloured, the deep rose tints of alpine glow lighting the cliffs for miles and contrasting with the darkness of the forests. We found ourselves lingering until the last purple vestiges had disappeared, leaving the peaks black against the western sky.

Early on the morning of June 30 our horses were saddled and packed, and we were once more on the trail. The fallen trees have been fairly well cleared, but there are still places where the wind has been at work and burned trunks are tumbled and interlaced like jack-straws. More than once we were glad to take the advice of the good Jesuit priest, Father Pierre-Jean de Smet,⁶ who travelled through an adjacent portion of the valley late in September 1845. 'At the entrance of each thick forest,' he writes, 'one should render himself as slender, as short and as contracted as possible, imitating the different evolutions in all encounters of an intoxicated cavalier, but with skill and presence of mind. I mean to say, he should know how to balance himself—cling to the saddle in every form, to avoid the numerous branches that intercept his passage, each ready to tear him into pieces, and flay his face and hands.'

We camped that afternoon on the slide below Mt. Hector, receiving the visit of several deer that joined the horses feeding on the slopes near by. Next day we arrived at Bow Lake, in time to enjoy several hours of excellent fishing, the catch of lake trout filling the pans to overflowing. At dusk a buck and two does walked through camp on their way to the water.

³ *Alberta and British Columbia Boundary*, Part II., 1917-1921 (Office of the Surveyor General, Ottawa, 1924), pp. 32, 40,

⁴ *C.A.J.* xii. p. 25.

⁵ *The Glittering Mountains of Canada*, Thorington (Lea, 1925), chapters iii.-vii. *A.J.* 34, 387; 35, 178.

⁶ *Life, Letters and Travels of Father Pierre-Jean de Smet, S.J.*, 1801-1873, Chittenden and Richardson (Harper, 1902), vol. ii. p. 513.

On July 2 our tents were put up beside the Wildfowl Lakes, a day of sunshine and shadow bringing us over the pass into Mistaya Valley with its long vistas into the remote north. A long day's ride brought us around the bend, above the Saskatchewan Forks, into the valley of Howse River, where we enjoyed a welcome bath in the shallow pools among the gravel bars. Up-trail, on a blaze several years old, was written in pencil: 'Wind blowing hard; snow drifting in: what a romantic life this trapping game is!' The blaze was high above the ground—the snow had been deep—and the handwriting was that of our old friend and guide, Conrad Kain. The principal fur taken in this region is marten; steel traps are used, although Indian hunters still make occasional use of deadfalls. Forty pelts is a good winter's catch, the skins bringing thirty to fifty dollars each, depending on quality and the state of the market. We saw no large game, although the bank of the river, with its flat sandy dunes, was criss-crossed with tracks of deer and moose.

Fording the river, on July 4 we drove the pack-train along the northern bank of Glacier River, past the log-jam—where there were fallen trees to be cut away before the trail was clear—to the lake. Keeping near the edge, we followed along the milky turquoise sheet of water, arriving shortly after noon at the flats at the far end, where we pitched camp in the fringe of a grove of spruce close to a clear stream coming from the head of the valley, in full view of the tumbling icefalls of the Lyell glacier.

We decided to lose no time in setting about our climbs, and shortly after lunch loaded our packs with camping equipment and provisions, carrying them over the level leading to the glacier. We had caught a glimpse of Mt. Forbes from the Saskatchewan, and from the lake shore; now its N. face was again revealed: 'a ramp of stainless snow whose knife-edged ridges culminate in a sharp point that pierces the blue heavens like a javelin.' Of the Lyell glacier itself, Collie wrote that it is 'incomparably the finest we have seen in the Rockies; it is on a larger scale than anything of the kind in Switzerland.' Passing several wooded islands margining the stream, we approached the ice. It seems to have changed but little since Dr. Hector's visit in 1858, and it was most interesting to follow his accurate description⁷: '... we reached a high

⁷ *Journals, Detailed Reports, and Observations relative to the Exploration of British North America*, Captain John Palliser (Folio. London, 1860), p. 110.

moraine of perfectly loose and unconsolidated materials, which completely occupies the breadth of the valley, about 100 yards in advance of the glacier.⁸ Scrambling to the top of this, we found that to our left a narrow chasm, with perpendicular walls, brought down a stream from a glacier descending by a lateral valley from the south, but that the greater bulk of the water that formed the river issued from ice caves that were hollowed beneath the great glacier of the main valley. . . . I now saw that the glacier I was on was a mere extension of a great mass of ice, that enveloped the higher mountains to the west.'

A huge rock promontory—Gibraltar in miniature—rises just below the ice terminus. Near its eastern extremity it is split by the narrow cleft which Dr. Hector noticed, now containing a stream of clear water, but giving evidence that at no remote period it served as an outflow for the Mons glacier lying in the adjacent southern valley. Now, however, the Mons stream runs on the western margin of the rock promontory, joining and deflecting the Lyell torrent, so that the combined river flows transversely with great force across the Lyell ice-front, eroding it as fast as it advances, well above the point where the ice terminus would normally be found. The water swings in a great curve before starting down the valley, in a violent, boiling flood, perfectly impossible to ford, carrying down blocks of ice weighing tons.

The ice facing the river rises above it in a cliff, twenty to fifty feet high. At the angle where the Mons stream joins the Lyell we found, after some searching, a bridge of broken séracs over which we could cross. Edward then cut a staircase up to the higher level of the glacier. The tongue below the icefalls is flat, and about two miles long. Throughout its length there is a sharply defined mid-line, dividing the clear southern ice of the precipitous fall adjoining Division Mtn. from the northern, débris-strewn segment derived from avalanches pushed over the cliffs from the higher levels of the icefield. Night and day the ice breaks off from the brink of the precipice

⁸ From Dr. Hector's description, and the size of the trees on the terminal moraine, one would judge that this moraine was formed at least two hundred years ago. At one time the Mons and Lyell tongues were united, and swept over part of the great rock promontory at the ice terminus, part of the stream following its present course, while a small volume escaped through the narrow canyon at the eastern end of the promontory. The Lyell tongue is now about 440 yards from the terminal moraine, a retreat of approximately 340 yards since 1858, or 15 ft. annually—an extremely slow recession.

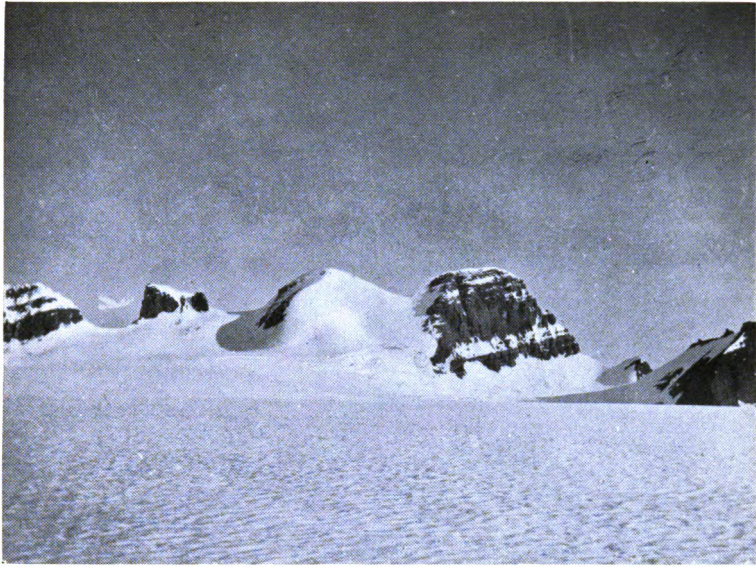
at the glacier's head ; giant séracs and pinnacles are outlined against the sky, and at last come crashing over. During the days that we observed it, scarcely fifteen minutes would elapse without an avalanche somewhere along the line. The Lyell tongue and near-by slopes are unexcelled positions for viewing this exhibition of natural force. The glacier possesses the largest moulins that any of us had ever seen : circular shafts at least twenty feet in diameter and unfathomably deep. As we walked along, we often turned to look into the valley : the brilliance of the ice emphasized against the softer tones of forest and meadow, the dull silver of the distant lake ; and Mt. Murchison with a narrow line of radiant cloud drifting across darkening cliff.

Mons icefield, lying just to the W. of Mt. Forbes (11,902 ft.),⁹ occupies about ten square miles ; the Lyell, just to the N., is double in size, the two fields being but loosely connected. The Lyell icefield is split by the continental watershed into two nearly equal parts, Mt. Lyell¹⁰ being situated on its northern margin. In former days, Mt. Lyell was considered as having but three peaks, but the Interprovincial Survey added two more to the massif. Peak 1 (11,370 ft.), the easternmost summit, and Peak 2 (11,495 ft.) lie to the E. on the Alberta side of the divide ; while Peaks 3 (11,495 ft.), 4 (11,260 ft.), and 5 (11,150 ft.) are located on the watershed in a line from N. to S. From Peak 3 the divide runs N.W. to Mt. Farbus. Although Peak 2, ascended by Outram, was considered by him to be the loftiest in the massif, the Interprovincial Survey reported an exactly equal height for Peak 3. The latter, being the Continental Divide peak, is the central and, therefore, the chief peak of the group as now constituted. It is certainly the most difficult ascent, as we were shortly to discover.

We left the ice tongue by the high slopes of the northern moraine, following a dry watercourse to avoid the tangle of willow and scrub-pine. Our packs were by no means light, and it proved a hard pull up to timber-line. Once on a shaly ridge above, the going was easier, and we had the amusing companionship of four curious goats that let us come within a hundred yards before they scrambled off. Before sunset we came to a little plateau of meadow, in a basin where an icy tongue just

⁹ Named in honour of James D. Forbes, F.R.S. (1809-1868).

¹⁰ Named for Sir Charles Lyell (1795-1875). The names Forbes and Lyell first appear on the Palliser map, and were presumably given by Dr. Hector although they do not occur in his narrative.



4

LYELL MASSIF FROM SOUTH.
Peaks 1-4.



6

Photos J. M. Thorington.
MT. ALEXANDRA AND PEAKS OF CONTINENTAL DIVIDE
from Lyell 2-3 Col.

8



LYELL ICEFIELD.
Peaks 4 and 5 from summit of Peak 3.

1 2 3 4 5 6

9



Photos J. M. Thorington.

7 8

PANORAMA NORTHWARD FROM PEAK 3, MT. LYELL.
1 Tsar, 2 Alexandra, 3 Clemenceau, 4 Bryce, 5 King Edward,
6 Columbia, 7 Farbus, 8 Oppy.

pushes over from the icefield's margin. There is a glacial rivulet, with storm-twisted trees growing in the flower-carpet. We set up the tents, lit a huge fire, and studied the Lyell map until the kettle boiled.

At 8.40 next morning we were off: through the heather along the brook, the lantern flickering fitfully, and the pale glow of morning already above eastern ridges. Up the grassy slopes we went, with scarcely a sound save the low murmur of streams and the clicking of hobnails against boulders. Even the Lyell icefall is silent at such an hour.

The horizon brightens, the lantern is out; a white-crested sparrow in the near-by scrub-pine is piping the eerie little triple-noted song so often heard at dawn and dusk in these mountains. Soon we are above the last vegetation, crossing snow patches and broken shale. From beneath our feet a ptarmigan whirs off into space; far below us now we see the meadow with our tents and the faint glow of embers in our camp-fire.

We came to the margin of the glacier tongue, snow-covered, which spills over from the Lyell icefield into the valley's head. Beyond this a slope of snow led us upward to crevassed ice at the margin of the field, where we stopped to rope (5.04). One must tramp over a snowy expanse for more than half an hour and climb up into a higher basin before the tips of the Lyell peaks come into view.

The eastern peak (No. 1) presents an icy wall, merging with easterly cliffs which plunge superbly toward the 'Valley of the Lakes.'¹¹ A lofty saddle connects it with the summit next adjoining—the gigantic pearly dôme that seems the centre of the massif when seen from N. or S.—an enormous split in the eastern snow ridge breaking its symmetry. The third peak stands alone, a blunt snow tower of primitive lines, guarded by rock precipices rising from the cols on either side. The two peaks remaining, just become visible above the narrowed horizon of the icefield basin, begin to brighten with the transparent light which rests on mountains when dawn colouring is only in the sky—Peak 4, a serrated crest of little snow points and rock splinters; Peak 5, a single, corniched snow spire.

As we climbed to the higher levels of the icefield we passed close by the head of the Valley of the Lakes. Mt. Wilson, across the North Saskatchewan, was a silhouette, framed

¹¹ Arctomys Valley is the approved name, given by the Inter-provincial Survey.

in a 'deep enshadowed trough, jewelled with a host of little lakes,' backed by purple clouds, margined with red and gold. A shattered glacier hurls its fall of séracs into depths unseen, and shafts of light from the east, reflecting back, set all the lakes agleam.

We stopped for a second breakfast. The sun rose above low-lying trailers of mist to warm us, our shadows stretching grotesquely across the snow. In less than an hour we were high on the slopes, rounding crevasses, watching with wary eyes for the little avalanches that pour from the ice slopes of Peak 2, making our way to the high col between Peaks 1 and 2. Then up the arête to complete the first ascent of Peak 2 (10). A splendid corniche adorns the top, and, unroping, I remained a little behind to film the climbers. At such an elevation in the Rockies it is probably the first time that a new climb has been recorded in motion pictures.

There was yet much to be done so, after building a small stone-man, we retraced our steps to the col and ascended Peak 2 (11.20), crossing out on the N. face to avoid the gigantic crevasse which breaks through the ridge. This was the peak which Sir James Outram and Christian Kaufmann climbed in 1902, and we looked down into the deep northern glacial basin through which they had made their way. We could see the little meadow above the valley of Alexandra River where Dr. Ladd, Conrad Kain, and I had turned back from an attempt in bad weather in 1923.

Beyond the river trench, which lay in shadow below the Castleguard alpland, spread the Columbia icefield. Lyell is an inspiring position from which to view it. Castleguard River is a silvery thread in the valley, 6500 ft. below, and behind it the largest icefield of the Rockies, seeming to fill the northern quadrant to the horizon, leaving room for only a few of the loftiest peaks to rear above its farther rim.

What memories in that circle: the bold cliffs of Saskatchewan and Athabaska, the sweeping lines of The Twins and Mt. Columbia! But the vastness of the field dwarfs its mountains, seen across distance, and it is as if one were looking at sails upon an arctic sea rather than at an alpine panorama. The massing of peaks along the Continental Divide was of especial interest to us. The rising corniches of Farbus and Oppy are followed by the soaring lines of Alexandra's peaks, with distant Tsar and Clemenceau respectively to left and right; then the icy crest of Bryce, the height of its main peak fully revealed, with the ridges of King Edward behind and swinging across to

Mt. Columbia. Over the centre of the icefield are The Twins, and Alberta, the battlements of the Athabaska gorge.

A thin arête of snow brought us down to the 2-3 col, where we stopped for lunch and to examine Peak 3. Ice and snow slopes, with an overhanging schrund, rise above the northern icefall, extending from a rock buttress, broken by icy couloirs immediately in front of us. Strumia and Feuz made a spectacular attempt to surmount these gullies, but after several hundred feet of cutting the angle became so sharp and the adjoining rock so brittle that they abandoned their efforts. There seemed no possibility of traversing southward from the couloirs.

We then went around to have a look at the N. face, but were forced down by the enormous crevasses, and could see no useful bridge across the upper schrund. It was past noon. Under the blazing sun the snow had softened, and we were sometimes waist deep, with more than a possibility that small slides would come down. We went on as fast as possible, skirting the southern slopes of the deep col between Peak 3 and Mt. Farbus. It had been my hope that from this col a practicable way to gabled Mt. Oppy might be found. Although the snow is broken up and one would have to go down considerably in reaching the col, we could see that there is nothing to prevent climbing Farbus from where we were. Beyond, on the British Columbia side, however, rock ribs and icy couloirs intervene between Farbus and Oppy, and the programme, while not too difficult in any part, is too long by way of the Lyell icefield. The Alexandra glaciers are still the key to these peaks.

We now thought that it would be a simple matter to cross the Lyell 3-4 col, completing our tour of Peak 3, and regain our tracks. Nothing of the kind! Peak 3, for once, presented a rock face, sheer for 1500 ft., opposed by a similar cliff on Peak 4, the two forming the narrow head cirque of a glacier that breaks off with appalling steepness to Lyell Creek. A band of smooth rock, more than twenty feet high, with a schrund below, extended across and formed the ridge of the 3-4 col, and even Feuz for a few minutes thought we should have to go back. Investigation of the terminal buttress of Peak 3 at last revealed a shallow, angular chimney leading up to a ledge whence it was possible to traverse to the level of the col. Little showers of water were coming down; the rock was friable, and there was danger of falling stones. However, there was nothing to do but go on, taking what shelter the projecting ledges would offer. It stands out as the hardest bit of work we had to do that day,

and no time was lost ; but an hour passed before we reached the col, less than a hundred yards away.

There we could stop to admire the unusual lines of Peak 4, a knife-edge of snow sweeping high on the cliffs like the prow of a ship ; the western precipice descending to the maze of icefall above Lyell Creek, down which we could trace the Bush Valley to the Columbia. Bush Mountain itself, a little to the S.W., is supreme in its area ; the peaks stream with large glaciers and are splendidly proportioned, rising to a great height above their surrounding valleys.

Tramping homeward, we turned many times to look at Peak 3 of Mt. Lyell. The architecture of its southern side—which now seemed our only hope—is bold in its very simplicity. Cliff buttresses, rising from the 2-3 and 3-4 cols, support a narrow central mass of snow : a sheer face between pillars, descending to the icefield, split into two equal parts by a narrow, vertical crest of rock midway between the skyline and the open bergschrund that sweeps across from one col to the other.

It was pleasant to come back at last to our camping place (8) ; the day had been a long one.¹² A porcupine came to the tents during the night, scraped the grease out of the frying-pan with grunts of delight, but departed in sorrow over our failure to leave out anything in the form of leather.

We stayed on the meadow next day, bringing in firewood ; fetching water from the near-by brook ; wandering over the carpet of heather and paint-brush, past storm-bent pines, to look at the Lyell glacier avalanching into the valley. Jim came up during the afternoon with a load of grub, and stayed for tea, which lasted until evening, and only Mt. Forbes remained in rosy light above the misty valley.

Clouds gathered ; the wind came from the S.W. Before midnight a storm had broken upon us : a veritable tempest, with a deluge of rain, and the gale souging through the trees and whistling along the tent ropes. By some lucky chance I had weighted the edge of the tent with heavy stones, and this was all that kept it from an impromptu flight in the direction of Glacier Lake. But the hurricane wore itself down and, about 3 o'clock, Edward called out that stars were in sight. Strumia and myself appeared, leaving Ostheimer in blissful

¹² Peak 3 in air-line distance from our climbing camp is 6 miles ; on our three crossings of the field we covered a total distance of approximately 45 miles.

somnolence—perhaps a wiser condition than we had chosen for ourselves. Here and there in the S. a peak showed up through billowing mist; there was one little patch of clear sky, but it had the look of inconstancy. We sat in the wet grass, eating beans and bacon by the sputtering fire, and then were off.

It was cold enough to make us hurry, and the icefield was quickly reached. The wind died down, and we came to the head of Arctomys Valley as the fireball sun came over the clouds about Mt. Wilson. Fog continued to blanket the icefield above 10,000 ft., rising and falling and shifting, but never clearing. The bases of the Lyell peaks were in sight, but their tops were covered and could not free themselves. We made a line for Peak 3, walking up into the mist. The icefield vanished; crevasses were looming, as they do when one comes upon them unexpectedly, and we could hear the constant slithering rattle of little stones dropping from our peak. We never saw it. The rope was out full length; we tried to force the slopes and came in sight of the bergschrund, but it was useless to go further. Keeping our level, with great care we made a lateral traverse to the 3-4 col; but showers of rain came up from the Bush Valley, and we beat a retreat.

A fast run in the loose snow brought us down below the clouds, but we kept on for several miles at top speed. The rain, drenching us in a final downpour, stopped suddenly, and the sun broke through in wandering patches. Forbes presented a magnificent spectacle across the reaches of the icefield, 'grand and terrible under the rapidly darkening sky,' as it must have appeared to Collie and his companions in 1902, the summit alone in light and striking up to a tremendous height through a girdle of lowering cloud. The peaks along Howse River were less obscured, Mt. Sarbach and the Kaufmann Peaks standing out in dark relief against banks of mist that were unbelievably white. We were almost sorry to go down to camp; our day was by no means a loss, for, though we had attained no peak, we had glimpsed the great heights in the clearing of a storm. There is no wonder of earth that approaches this.

July 8 was brilliantly clear. Edward went down to the base camp for provisions, returning late with news that the ice tongue had melted considerably; that the steps were gone and the bridge fallen. The river could not be crossed, and he had been forced to go up and cut steps across the Mons tongue to gain the Lyell glacier. Strumia and Ostheimer climbed the rocky crest opposite camp, past the Lyell fall to the icefield,

and went on over soft snow to the base of Peak 5. On the watershed itself, in the midst of broken limestone, they found a huge smoky-quartz crystal more than seven inches in length. In another direction, I spent a goodly portion of the day on the slopes behind camp, watching the marmots and gophers playing on the hillside, and taking the motion picture camera to the southern wall of the Valley of the Lakes. Although the East Lyell glacier cannot be seen, the floor of the valley is in view throughout its length, with nearly two miles of dry grassy flats in the upper portion. One can walk along the ridge between the valleys of Arctomys Creek and Glacier Lake with the greatest of ease ; there is a small pond in the very crest, formed by melting snow, where ptarmigan come to bathe ; and the panorama embracing the peaks of Howse River, Mt. Forbes, and the Lyell field from end to end can scarcely be excelled elsewhere in the Rockies.

The problem of Mt. Lyell's third peak still confronted us. 'A first-class thing,' remarked someone at the camp-fire, 'worth more than a try for Forbes.' The heresy went unchallenged, because we all held a similar opinion.

Our third crossing of the icefield was made on July 9 ; a clear, starry night with the Great Dipper pointing out our way. We started at 1.30, guided by the lantern's light, and climbed to the ice without a halt. A little crescent moon hung low in the E. ; the air was cold and still. We roped and made fast progress over the frozen crust. We knew our way this time, the only one we could discover ; we must be there early and take our peak stealthily, or the sun would rise and signal for bombardment. Over the undulations of the field we came at last to the bergschrund. We had planned to go to the 2-3 col, if necessary, in crossing the crevasse ; but now we could see a small bridge farther to the left. We balanced along its lower lip, anchoring while Edward cut the first steps to the higher snow. In the 3-4 col Bush Mountain was framed above the misty gorge of Lyell Creek.

Up the eastern half of the snow gully we climbed, cutting deeply, against our return, step after step in the half-frozen wall. Crossing diagonally to the central rib, Edward cleared off about a half-ton of rock débris, which thundered down to the icefield. Now in a little chimney, often on the crest, we came again to snow where steps must be hacked into underlying ice, and the rearward climbers guard their faces from the swishing fragments. The gradient lessened and we walked in the curving brim of the snow funnel to the summit ridge, and on to the

rocky outcrop at the W., which is the highest point (6.30 A.M.). The pace had been furious : we had come up from camp in but five hours, and the summit had been won in a breathless hour from the schrund. 'The earliest I have ever been on a big peak in the Rockies,' said Feuz.

One recalls few mornings more crystal than this : one of those rare days, seldom repeated, when the very horizon seems transparent and there are no bounds to visibility. In the W. the Selkirks, seen from end to end ; from the Battle Range to the tip of the Columbia Loop, sharply defined. We could look down over the western precipice of our peak to the tumultuous icefalls of Lyell Creek, tracing the valley to the Bush, and the Bush to the Columbia. Across the Columbia Valley our gaze penetrated even its lateral tributaries ; we could look into Gold River below the majestic pyramid of Sir Sandford, directly W. of us.

A thread of golden-brown smoke hung across the northern valleys ; all the higher peaks rising above it, an archipelago in the sky : Tsar, dark and superbly isolated in the N.W. ; the groups of Wood River and the Whirlpool ; Bryce, Alexandra, and nearer peaks in the massed line of the Continental Divide ; the white sweep of the Columbia icefield brilliant as polished silver in the early light.

Rising above and behind Mt. Wilson, seen through Arctomys Valley, are two rock peaks close to each other. The southern, near the Saskatchewan, about opposite the mouth of Siffleur River, is the loftier and must approach 11,000 ft. in elevation, overtopping Mt. Wilson. This is the mountain which Collie named Mt. Cline.¹³ There is very little snow on its western face, and its summit lines are symmetrical and sharp.

When on the Columbia icefield in 1923, we had noticed the N. to S. alignment of Alberta, The Twins, and Columbia. Here, on the central peak of Mt. Lyell, we saw that if this line be bent S.E. from Columbia it will cross Lyell, Forbes, and the heart of the Lake Louise group. This is a simple explanation of the difficulty in identifying these northern peaks from Lake Louise summits unless one has become familiar with the

¹³ From the summit of Mt. Noyes, Collie (p. 305) locates Mt. Cline as 'almost due north, and to the right of the most easterly point of Murchison.' The position assigned to it by the Geographic Board of Canada (*Eighteenth Report*, 1924) is lat. 52° 05', long. 116° 45' ; that of Mt. Wilson being lat. 52° 01', long. 116° 46'. The elevations are not stated.

topography. As one faces S.E. from Lyell, the Freshfield group is seen across the western shoulder of Mt. Forbes.

We returned in our tracks to the icefield. Although we had spent less than an hour on the summit, the consistency of the snow had changed. We faced the slope, moving cautiously downward, with the last man belaying the rope over an axe hilt-deep in the wet snow. As it was, more than one step broke and slipped down. It was a relief to step over the bergschrund and glissade out of the line of fire ; an hour later the way would have been risky.

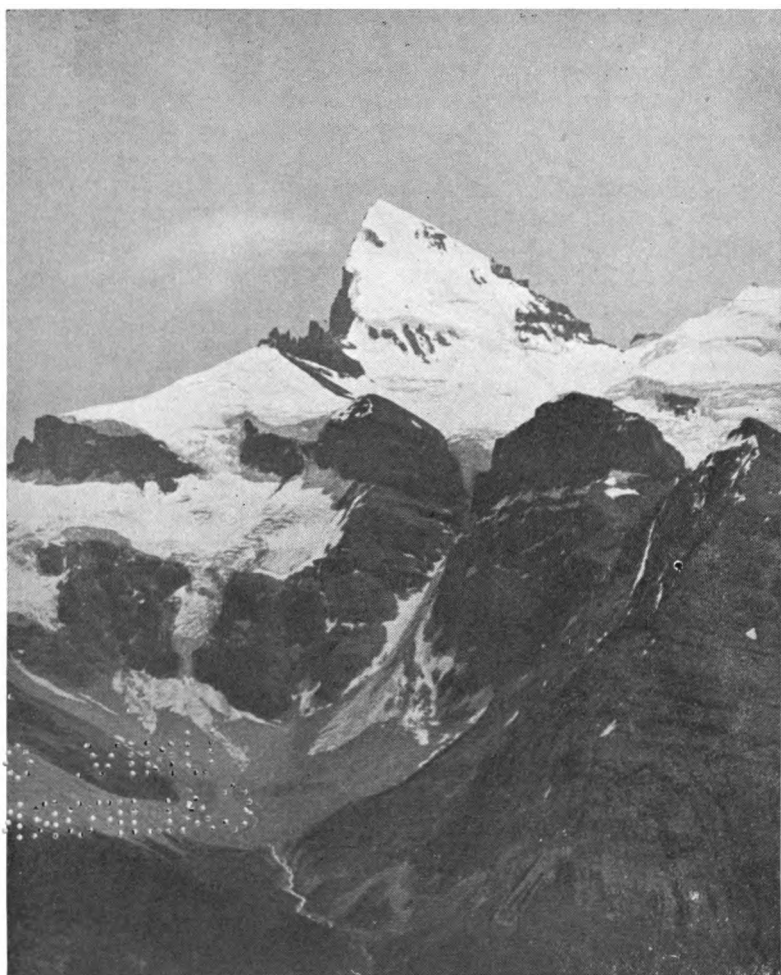
We skirted the margin of the field close below the face of Peak 4, swinging out through the broken ice blocks of an old avalanche at the base of Peak 5. Here, on the snow, we were surprised to see recent tracks of a wolverene. Just why he had chosen this arctic terrain for a promenade, or what became of him, we never knew. Through a maze of séracs and tricky bridges we climbed to the southern shoulder of Peak 5, and up a long arête of steepening snow to the summit (11).

This is the first time that two new ascents in the Rockies exceeding 11,000 ft. have been made in a single day. The summits of Peaks 3 and 5 are more than a mile apart in air-line. We sat on the edge of the corniche, ambitious enough to cast longing eyes at Peak 4 ; but the intervening traverse is long, the snow was in bad condition, and we decided to be lazy. So, when a sufficiency of tobacco smoke had wafted upward, we turned back for a long glissade to the icefield. Following the edge of a shaly ridge, here a part of the Continental Divide, we circled into the homeward track. The snow was watery and our progress infinitely slower than in the early morning. The melting during the past days, aided by nights of rain, had been tremendous : wide stretches of bare ice were exposed and crevasses opened. Frequently Edward was forced to deviate from our beaten path.

Edward, at the camp-fire that night : ' A good deal more interesting than anyone thought, those peaks : the best unclimbed that were left. And, Gott, what a view : I shall remember it all my life long ! Still, I think those Lyells are laughing at us yet.' By which he meant that Peak 4 is still to be done. It is a good peak, but we had put tracks enough on the icefield for one year.

Next morning we took down the tents and packed our heavy loads to the base camp. We left the glacier by the N. lateral moraine, following the river bank and fighting the timber to a point where the water spread over the gravel flats. We got

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Phot. J. M. Thorington.

MT. FORBES (11,902')

Fifth elevation of Canadian Rocky Mountains. North face from
above Glacier Lake.

across, partly by wading, partly with the horses, which Jim sent out in answer to our shouts, and made our way through in time for lunch. We were in no mood to be charitable with the food supply.

What is there left to say of Mt. Forbes—that wonder-mountain we had placed, with some temerity, at the end of our climbing programme? It is a height to which one may look up, as did Kim to the rim of Himalaya, and say, ‘Surely the Gods live here.’ Skyward rearing, like a watch-tower of the immortals, it is a perpetual challenge. Collie, although it was just before he and his companions made the conquest in 1902, described Mt. Forbes as ‘the finest and most commanding, and probably the most difficult, of the high peaks in the Canadian Rockies.’ Perhaps, with increased knowledge of the range, this should be a little modified; but even Feuz, who repeated the route with Dr. Hickson in 1921, pointing it out to us from Mt. Lyell, could exclaim, ‘The finest peak in all the North!’

The two ascents preceding had been made from bivouacs to the S., above the valley of Forbes brook, where the mountain rises in terrific black precipices to an ice-crowned point. We, however, had designs on a new route from the N. which would not only include the splendid snow-face we had seen so often from Columbia, Lyell, and other elevations, but would prove the feasibility of the climb from the valley of Glacier Lake.

On July 11, at 4 p.m., we left camp with only the provisions for one day in our rucksacks, and started for the glacier. Crossing the moraine and following the edge of the torrent as it swings past the Lyell tongue, we scrambled through the underbrush to the narrow Mons glacier. We took to the ice a short distance above the snout, walked up and cut across to its western margin, gaining ledges which were followed to a little timbered basin beside the icefall. Huge boulders lying near each other, with intervening hollows filled with moss, suggested a comfortable bed. We halted (7.15) by a bubbling spring, dragged in a gigantic pile of firewood, and soon had the kettle boiling. It was a warm evening, with scarcely a breath of wind, and we soon made ready for bed. Close by the fire Edward and I piled moss and fir boughs into a cranny between two rock slabs, using the rope as a mattress, and lay down under the stars. There have been worse bivouacs. All was quiet save the crackling logs, the intermittent grumbling of the icefall, and Edward asleep.

It was after midnight when we arose to replenish the fire, the starlit sky giving promise of continuing good weather. At

1.25 our lanterns were lighted and we started out, winding our way through the bushes and climbing toward the moraine. Opposite the top of the icefall we were obliged to halt on a ledge for half an hour, until it became light enough to see the way through the upper rock belt ; we sat there jodelling and singing, looking down to the glowing fire at our bivouac far below. We were off again at 3, gaining the top of the rocks and following the crest of the moraine at the margin of the Mons icefield.

Above the icefall the glacier is flat and broad, with crevasses at regular intervals, extending in perfect arcs from side to side and leaving intervening steps of flat ice, one above the other, like benches of an amphitheatre. It took us half an hour to walk across on one of these levels, and then over a hillock of moraine to the N. Forbes glacier. We started up the untrodden ice which swings down in a great curve below the long wall of the unnamed peak just W. of Mt. Forbes. We put on the rope. Forest-fire smoke had drifted in from the W. ; the red sun rose above a group of fantastic pinnacles, throwing its light across the glacier to Mons Peak. We came into a chaos of broken ice, enormous chasms, interlacing, with flat insecure bridges. ' Nifty big ones those are ! ' mused Edward, as one of us went through to the waist and was pulled up sharply.

Turning the corner to compact snow, the final 2000 ft. of Mt. Forbes appeared. Foreshortened, the face in shadow, the long, vertical strokes of avalanche tracks yet contrive to give the peak an appearance of unusual height, although lacking the skyward sweep which characterizes it from a distance. From the western col (7.30), our course turned toward the rocks up a shaly slope to the immediate problem of the lower cliff belt. This seems to have been troublesome to our predecessors, both of the preceding parties having descended in this direction. The key, not easy to see at first, is a narrow, twisted chimney, reached by a lateral traverse on a small ledge. One steps into a little cavern at the bottom, reaches through a slot at the top for a high handhold, swings out over a slight overhang, and gains the upper part where the chimney broadens and the work becomes less strenuous. The rock is not firm, although rather better than on Mt. Lyell. Altogether entertaining.

Above us stretched a long slope of loose angular shale, just at its angle of rest and ready to shift at a touch. We built a small direction cairn to guide us to the top of the chimney upon return, thence proceeding upward to snow and ice. The face of the mountain was seamed with slides which had come down during recent storms, and we swung out toward the western

arête, cutting around the upper corner of a deep couloir which breaks toward the S. glacier. The ridge was near, gained about 1000 ft. below the summit by climbing several rickety towers in the last stages of disintegration. The western crest formed the remainder of our route: now ice, where the steps must be cut with care; now rock ledges, to be skirted above the great northern slope; or snowy gables, perched in the uppermost funnels of the southern couloirs, a last narrow slope rising to the very top (9.45).

Over the corniche we could look down into the valley of Glacier Lake and, across it toward the N.W., to the plain of the Lyell icefield, with Mt. Columbia towering above Peak 3. Distances were entirely lost in the smoke: a disappointment, since here we were on the highest of the 11,000-ft. peaks—the fifth elevation of the chain—hours earlier than anyone before us, and the miles of interesting topography hidden from view! The overhead sky was clear. We sat on the warm rocks for fifty minutes, with Forbes brook almost below curving down from its sources on Bush Pass. The Freshfield peaks were before us in the S., a range of giants, dim in the haze.

One incident of the descent stands out vividly in recollection. We retraced our steps slowly, as the melting ice required care in several stretches. The ridge towers were crossed and we turned down the face, stopping for lunch on the lower lip of the conspicuous gully which cuts through toward the S. Suddenly there was an ear-splitting crash above, and one of the towers up which we had climbed in the morning, and which we had just descended, came banging down over our tracks straight toward us. Of course the couloir caught it, but the noise was terrific, and the air filled with chips and dust and the smell of sulphur. We had knowingly chosen a very safe halting place, but we had not expected a big rock avalanche to come so close. It is rather like the charge of a caged animal: the bars protect you, but for an instant one forgets that bars exist.

When the clatter had subsided we hastened downward, with many a look backward lest other stones might follow. We swarmed down the chimneys of the cliff belt, which Edward christened 'the Englishmen's band,' in memory of the first ascent, and were soon at the W. col (12.35). The bivouac was reached after a leisurely descent (3.30); we were tired, and glad enough to lie down on the grass beside the spring. Edward had just brought the tea to a boil, when the supporting stick gave way and the brew poured into the fire. One would not

willingly have missed the postgraduate course in patois which followed. Two hours later (6) we walked into the base camp.¹⁴

July 13 was a day of rest in the valley, spent in various interests and amusements. During the morning I walked back to the glacier to photograph the old terminal moraines, taking along a cyanide bottle and collecting beetles¹⁵ on the way.

On the following morning camp was broken, the horses packed, and we departed down-trail. Howse River was forded and we ascended the stream, over the flower-decked bars, to the amphitheatre of Forbes brook, reaching the Freshfield terrace in the early afternoon (8.20-2.30). The weather was cloudy, with intermittent showers. Ostheimer and I devoted ourselves to the glacier, checking on the observations made in 1922.¹⁶

Strumia and Feuz, with an early start on the morning of July 15, were successful in making the first ascent of Mt. Solitaire (10,800 ft.),¹⁷ the highest and most interesting un-

¹⁴ The total distance from the base camp, traversed on the ascent of Mt. Forbes, approximates 16 miles.

¹⁵ The writer makes no pretence of being an entomologist; but specimens were collected in the interest of the North Saskatchewan headwaters being a practically unstudied terrain. The icefields are rich collecting grounds, as the insects are carried up and deposited in great numbers by air currents. At our various camps and on our climbs, 160 Coleoptera were obtained in good condition. Among the palaearctic species are: *Judolia sexmaculata*, L. (Saskatchewan River); *Acmaeops pratensis*, Laich. (Glacier Lake); *Miscodera arctica*, Payk. (Glacier Lake). The latter is extremely rare, with but few American records. The results have been reported in a paper entitled 'Some Coleoptera of the N. Saskatchewan Headwaters,' *Entomological News*, xxxviii, April, 1927.

¹⁶ The results were reported by Howard Palmer in the following papers: 'The Freshfield Glacier, Canadian Rockies,' *Smithsonian Miscellaneous Collections*, vol. 76, No. 11; and 'Observations on the Freshfield Glacier, Canadian Rockies,' *Journal of Geology*, xxxii, p. 432. The observations of 1926 have been reported in a paper entitled 'The Lyell and Freshfield Glaciers, 1926,' *Smithsonian Miscellaneous Collections*, vol. 78, No. 6, and it will here suffice to state that the glacier is definitely in a cycle of retreat, the frontal recession since 1922 (1463 days) being 330 ft. During the same period, stones on a line 3750 ft. above the tongue advanced 380 ft.

¹⁷ So named by the Interprovincial Survey because of its isolated, solitary position at the head of Conway glacier. The peak lies more than a mile W. of the watershed, and appears to be the chief source of the balls of iron pyrites found in the moraines. When seen from Mt. Forbes, the mountain is characterised by a huge vertical cleft in the profile of its western arête.

climbed peak of the group. With but two on the rope they were able to make fast time, going up the glacier and icefield to reach the col on the S.E., whence the summit was attained over the steep slabby arête (ascent from camp, 4.15-11; descent, 11.50-4). Fog obscured the view.

Completing work on the lower glacier, I walked up in the driving rain to photograph the lateral-alcove tongue below the Niverville meadow. It was a melancholy pleasure to come back to the site of our climbing camp of 1922: the bleached poles that had held the kettle; the little ring of moss where once had been our fire. Perhaps one should never return to a place that has once seemed so beautiful. And yet, the nodding flowers seemed brighter in the sparkle of rain; a brown weasel appeared on the edge of a near-by pool, hissed and was gone like a shadow; a bank of mist lifted on a shaft of light and let me see the icefield to its very head.

Next day, on our way down Howse River, we camped on the E. bank, midway between and opposite the streams from Sir James glacier and Glacier Lake. There is some evidence that this was the camping place of David Thompson, explorer of the North-West Company, in June 1807, just prior to his crossing of Howse Pass.¹⁸ It is the uppermost camping place in the valley, with a fine spring of water and abundance of protecting timber. The cuttings are extremely old, a number of large trees which were felled green having now rotted completely through. Back from the river, on the edge of the spring, are several trunks which are crossed and notched in cabin lengths, the work having then been abandoned. The wood is falling into powdery dust. We noticed several blazes, with surrounding new growth nearly two inches thick, but there were no legible marks. The mountains across the valley correspond in elevation with the measurements made by Thompson; Mt. Forbes is not visible. The distance to the pass is slightly more than eight miles, which would have made possible Thompson's early morning arrival.

A long day took us to the Wildfowl camp, and on July 18 we came to Bow Lake. Pursuing storms overtook us shortly after the tents were put up, and rainy weather lasted through the next day. Strumia and I became enthusiastic fishermen, bringing up our total catch of trout to fifty. We used minnows

¹⁸ See, *Quarterly of the Oregon Historical Society*, March 1925, p. 23 ff. The document transcribed therein is further discussed in *The Glittering Mountains of Canada*, p. 284 ff.

for bait, wading in the brook and stampeding them into a small net. With a short length of line out from the rod, and using two hooks, we more than once brought in two fish at a time. We lack the nerve to tell about it at home.

On July 20, Edward, Strumia, and I climbed over to Yoho Valley, Ostheimer electing to accompany the pack-train to Lake Louise. It was a grey, cold day, with new snow far down on the mountains. We left at 5 A.M., walking around the edge of the lake and past the canyon at the foot of the ice.¹⁹ Climbing through the timber and scree, we crossed above the terminal icefall and reached the Wapta field near the corner of Portal Peak. There was a sprinkle of snow, and the mists came down as we set our course for the flat pass between Gordon and Rhondda. We plodded along through softened new snow, the weather suddenly taking a change for the better and abetting our decision to ascend Mt. Collie (10,815 ft.). Making our way above the head of Yoho glacier, an interesting route was found leading up a long, irregular chimney in the eastern rock rampart to the southern glacier, whence the eastern snow arête was reached at its lowest point. Fog continued to blow over from the N., and at this point Edward marked a large arrow in the snow, pointing toward the Yoho. The crest of the mountain is very narrow, but it was possible to kick steps nearly all the way to the corniched summit. We did not stay there long, as it was cold and blowing; water was obtained from an icy pool below the topmost rocks, and a record left in the frosty cairn. The mists lifted in the W., uncovering Mt. Mummery and the Freshfield wall; there was a glimpse, through Howse Pass, of the far-away Saskatchewan reflecting sunlight.

We descended rapidly, along the western base of Yoho Peak, over the Habel glacier above Twin Falls, toward the meadows of the Little Yoho. Wading the stream more than once—for bridges are few—we came at last to Takakkaw (7). I had packed over a dozen of the best trout, which were soon frying

¹⁹ The retreat of this tongue since 1922 has been considerable. In photographs taken in 1902 the icefall is seen to cover entirely the cliff over which it precipitates. In 1922–1923 the fall had a notch melted in its western side, baring a belt of cliff. In July 1926 the cliff was bare through two-thirds the width of the fall, leaving the névé connected with the tongue only by a narrow tenuous ice-spout at the eastern angle. If this be further progressive, the glacier tongue will be cut off from the névé, transforming a continuous alpine glacier into a reconstructed type.

in the pan, none the worse for their excursion above the snow-line and across the Divide into another province.

Our journey was at an end. Favoured by fortunate breaks in the weather, we had attained our objectives without loss of time. The Lyell icefield and its peaks had exceeded our expectations. The feasibility of Mt. Forbes from the N. was proven. So when the morning came again, with the peaks standing out against a sky of clearest blue, it is scarcely to be wondered that we looked at them with some complacency, in the happy memory of our northern wandering.

WANDERINGS IN THE KUMAUN HIMALAYA, 1925-1926.

By H. RUTTLEDGE.

THE good fortune which ultimately rewards the faithful gave me charge of the Almora district of the Kumaun Division in April 1925. The northern portion of this area lies in the heart of the Himalaya, and is a glittering paradise of ice and snow, dominated by the great peaks East Trisul, East Nanda Devi, Nanda Kot, and Panch Chulha. One-third of the district is to the N. of these giants, and abuts against the great barrier beyond which is Western Tibet.

Orders were received in May to inspect the Indian section of the trade route which runs up the Milam or Johar valley and over the Untadhura pass into Tibet; and a study of the map showed that the shortest way from Almora to Milam would be up the valleys of the Sarju and Pindar rivers, over the Pindari glacier and Traill's pass, between Nanda Devi and Nanda Kot, and down the Lwanl Gadh, explored by Dr. Longstaff in 1905,¹ to Martoli, nine miles S. of Milam. This route would, further, afford an excellent opportunity of cultivating friendly relations with the Danpurias of the Sarju and Pindar valleys and with the Bhotias of Johar, who carry the trade between the United Provinces and Tibet.

By great good fortune, Colonel R. C. Wilson, D.S.O., M.C., of the General Staff, an experienced member of the Swiss Alpine Club, was able to join us from Ranikhet; and he brought Major T. C. Carfrae, M.C., R.F.A., of the Alpine Club. My wife and I completed the party.

¹ *A.J.* 23, 208; map facing 207, which should be consulted with reference to this paper.—EDITOR.

Leaving Almora on May 26, we proceeded by the above-mentioned route to the Pindari glacier, and made an unsuccessful attempt on Traill's pass. Our adventures on that occasion, and again this year, have been described by Colonel Wilson in another article, so I can pass on to the time when we found ourselves, after a very wet journey round by Tejam and Mansiari, at Martoli, where we arrived on June 12. Here we had a magnificent view of Nanda Devi, at the end of the Lwanl Gadh; and spent a pleasant afternoon in the neighbourhood of the Salung glacier, returning to camp through the only forest in that region. It lies above Martoli, at a height of about 12,000 ft., and consists of birch trees, sacred to the goddess Devi.

Next day we reached Milam, where the Bhotias were beginning to assemble for their annual trek to Tibet. Carfrae, unfortunately, was far from well, and was unable therefore to join in an exploration of the Milam glacier. Being, however, a man of resource, he ministered to our comfort by shooting a couple of burhel, most succulent of sheep.

On June 15 the rest of us took a light camp about ten miles up the left bank of the glacier, in magnificent weather. From local information we gathered that the ice is steadily retreating; the snout of the glacier is now between two and three miles above Milam. For about seven miles there is no clear ice, the surface being a tumbled confusion of stone débris fallen from the rocks above. This débris is banded in different colours, grey, light and dark brown, and red, for a distance of two miles; each band about a hundred yards in width, and at right angles to the course of the glacier.

Five side glaciers, falling from one of the great northern ridges of Nanda Devi, meet the Milam glacier from the W. Two only of these are named in the survey map—the Shakram and the Mangrau. They are bounded by high peaks, one of which, apparently that marked 21,700 ft. in the map, is a stupendous aiguille, guarded by hanging glaciers whose capacity to cling to its precipitous sides roused our astonishment.

There is only one glacier of any importance on the E. side, near the ice-fall at the head; but we had to cross some old moraines.

At a height of 12,800 ft. we came to the Shangas Kund, a charming little lake about 200 yards long, its banks gay with flowers and grass. Thence a wearisome scramble over old moraine matter took us to the highest grazing ground, at about 14,000 ft. Here we took to the left lateral moraine, crossed a

narrow strip of dry glacier, and went up the big medial moraine which leads to the ice-fall, some twelve miles from Milam. It was now getting late, so we prospected two alternative ways of advance for the morrow, and returned to the grazing ground, where we spent a very fair night, protected in a convenient hollow from the rising wind, the ' Rani ka pankha ' or ' Queen's fan ' of Johar.

Next morning broke fine. The left lateral moraine, close under the left bank, afforded good going along a narrow crest. Crossing at a spot where the E. glacier debouches, and where we found the tracks of what must have been an insane bear, we got into a trough of snow-covered ice, which led without difficulty of any kind to the foot of the ice-fall. The glacier at this point is about half a mile in width. We now roped up, with Wilson in the lead. With us were a Bhotia named Shama, in a pair of borrowed boots, and my orderly Khushal Singh. Some two hours of interesting work brought us to the top of the fall, there being no major incidents except the necessary suppression of Shama, who disapproved of conventional mountaineering methods and proffered much unwelcome advice. Luckily there were no snow bridges of any size to cross, for the terrible sun made everything very soft, and we all put a leg through here and there. The séracs were of small size, and stable. We now reached névé, in the main catchment area of the great peaks at the head of this valley. Above, to the N., towered peak 23,220 ft. of the survey map. To the W. was a very steep glacier falling from a col which must overlook the Bagini. From the N.E. the Milam glacier was joined by another, the ascent of which should enable one to reach the Girthi valley. Such an expedition would, however, have entailed at least another day's work, for which we were unprepared ; and there was no convenient spot on which to camp.

We got off the ice on to the left bank, and painfully clambered up a very steep shale slope to a corner of rock, at about 16,500 ft., whence there was an excellent view of the N.E. glacier. This would be very well worth exploration, but its ice-fall looks both long and difficult. Still more difficult is the W. glacier ; could one but reach the col at its head, one would see the Bagini² and join hands in spirit with the Longstaff-Bruce-Mumm expedition of twenty-one years ago.

As we turned to descend, a tremendous avalanche roared

² *A.J.* 24, 110.

down the slopes of peak 23,220 ft., shortly followed by one down the fall of the W. glacier. Generally speaking, however, the absence of avalanches was a remarkable feature of this region, considering the time of year.

The return to Milam was effected the same day, or rather night, and was replete with all the miseries incidental to glacier travel. Its earlier stages were enlivened by Khushal Singh, who took advantage of our having unroped to fall into an obvious crevasse. Happily he was rescued without difficulty ; and the experience was beneficial. The average hillman, a capital performer on rock, thinks he has nothing to learn from a sahib on ice and snow. Mere words are powerless to correct this impression.

Milam is a capital place for a base camp. It is only ten days' march from Almora by the ordinary route ; supplies can be brought up with fair facility and at moderate expense ; and there are many peaks and glaciers to be explored. The Bhotias are uniformly friendly and helpful.

The monsoon now showed unmistakable signs of breaking ; we had just time to go up to the end of the Lwanl Gadh and prospect a way for a renewed attack on Traill's pass in 1926 ; and were back in Almora by June 27. Though our achievements were few, we had learnt much which should be useful for the future ; some experience had been gained of ice and snow and rock conditions ; and friendly relations had been established with the local people, an important matter when one is dependent on them for transport. One thing is clear : the local hillman, Danpuria or Bhotia, though on the whole willing and good material, must be properly clothed and shod and trained before he is fit to go high. Gurkhas are better, but apt to chance everything. During June the snow, in spite of the hot sun, appears to be pretty stable. Much of the rock in these regions is very rotten ; when sound, it is a hard and slippery limestone.

The year 1926 dawned brightly for us, with prospects of an expedition to Tibet, to inquire into the conditions of Bhotia trade. This would not be possible before the second half of July, when the Bhotias cross the passes ; but June and the first half of July could be well spent in the three main valleys which lead from the Almora district to Tibet, namely those of Johar, Darma, and Chaudans-Byans. One would get to know the Bhotia traders, to understand their relations with the Tibetans, and to realise their transport difficulties ; and, should any peaks or glaciers present themselves *en route*, it

would savour of ingratitude to Providence not to visit them and thereby absorb what all cultured people consider so important, namely 'atmosphere.'

Fortunately, Colonel Wilson, now commanding a brigade at Manzai, was able to join us again; and, my luck continuing, I was able to persuade Mr. T. Howard Somervell, with his wife, to leave their labours at Travancore and spend their short holiday with us. Last year's experience had shown the advisability of having something better than the local talent for high portorage; Somervell imported from Darjeeling two of the Everest Sherpa porters, Chettan ('Satan') and Mingma ('Alice'); and Colonel A. H. R. Dodd, commanding the 1/3rd Queen Alexandra's Own Gurkha Rifles at Almora, very kindly lent the services of Havildar Nain Singh and Rifleman Birta Singh, commonly called 'Form Fours' on account of his propensity when a recruit for drilling himself when off duty. These men were of the greatest value.

The weather during May was most unpropitious, and we did not get away till the 19th, when reports of deep snow in the Pindar valley decided us to postpone an intended renewal of the attack on Traill's pass, and to make straight for Milam, where we arrived on the 30th. Plans discussed *en route* had crystallised into a resolve to explore an unnamed glacier, called Timphu by the Milamwals, which runs parallel to and between the Panchu and Shakram glaciers, W. of Milam. We hoped that by this route it might be possible to reach a point on the rim of the great 'saucer' in which Nanda Devi stands, and to see down into the glacier which abuts against the N. face.

On the 31st, taking the Sherpas and Gurkhas and a few coolies, we started up the left bank of the Milam valley, crossed the snout of the Milam glacier, and doubled back along the right bank to the gorge up which we had to go. A scramble up a steep grass slope to a height of 13,000 ft. led to a convenient camping ground, and as snow and sleet now began to fall we sent back the coolies and settled down for the night.

Next morning, in better weather, but all heavily laden, we walked up the narrow snow-filled gorge for a distance of about two miles, after which we got on to moraine and spent several hours on its interminable and exceedingly narrow crest, till a height of 15,300 ft. had been reached and the only possible site for a camp had been found. The hot sun and our heavy packs produced a highly decorous rate of progress, to say nothing of severe headaches all round, and I was glad that my wife had remained at Milam with Mrs. Somervell.

The glacier is shown with very fair accuracy on the map. It has two ice-falls, one just short of the steep glacier coming in from the N., the other about a mile farther up, after which the glacier abuts against the precipices falling from the great ridge which descends from E. Nanda Devi. The ridge itself looks unclimbable till it turns to the N., to continue the rim of the 'saucer'; here a way might be found. Our plan was to turn the first ice-fall and attempt a peak about 21,000 ft. high above the true right bank of the N. glacier, from which a view of the N. face of Nanda Devi might be obtained.

Next morning we took the Gurkhas and walked up the easily inclined and uncrevassed glacier to the foot of the first ice-fall. At first we thought of crossing here to the left bank and climbing some fairly steep rocks which would have landed us on the left bank of the N. glacier, and apparently within easy reach of our peak. But the rocks looked very rotten, and 'Form Fours' in climbing boots is a danger not to be despised, so we preferred an easy slope of snow which appeared to turn the ice-fall on the right bank of the main glacier. The snow was in good condition and we mounted rapidly; but our optimism was premature, and before the ice-fall was finally turned we had spent the best part of three hours entangled among crevasses, merrily bombarded the while by stones from the wall of rock on our left. We then found that the upper glacier was much crevassed, and that it would take the rest of the day to reach even the foot of our peak; and our tents and supplies were on the moraine below. The order was therefore given for retreat, and we were back in camp by sundown, the descent being complicated by 'Form Fours's' preference for the seat of his trousers to his boots as a means of support in steps. We had only reached a height of 17,100 ft.; but it was clear that further exploration here would be well worth while, and that the rim of the 'saucer' is attainable. At least two camps would be necessary.

Somervell's short leave was now drawing to a close; but there was still time for one more effort. There is an attractive looking peak, locally called the 'Qualganga ka pahar.' It lies $5\frac{1}{2}$ miles from Milam, bearing 50 degrees N.E. It is triangulated, but the height is not marked on the map. The mean of several observations from Milam with an Abney level gave a height of 20,200 ft. Two purposes might be served by its ascent: firstly, we might get a good view of the N. face of Nanda Devi; and, secondly, we might be able to see over into Tibet and trace out an improvement on the Untadhura pass, which is a great trial to the Johar Bhotias and their sheep in bad weather.

We all left Milam on June 5, and camped just beyond Sam-gong, at 12,100 ft., under the W. face of our mountain. Next morning, in beautiful weather, we crossed the river by a snow bridge, after which a convenient snow-filled gully afforded an easy ascent for several hundred feet. Our objective was a ridge falling to the S.W.; but to reach this we had to struggle for hours up very steep scree, and it was 2 P.M. before we succeeded. The ridge consists mostly of loose rock and rotten gendarmes, not difficult but excessively laborious. At 15,600 ft. we found a spot which could be made to accommodate a Whymper tent, two Meades, and a light bivouac. The coolies were sent back on their way rejoicing, the Sherpas and Gurkhas being retained for next day's work. Nanda Devi, some fourteen miles away, was a magnificent sight; and though clouds made accurate observation difficult we could see the two great N. ridges, running respectively from the main and E. peaks. Neither looks at all climbable.

The next day's work began with some hard slogging up a very steep snow slope, of a curious ridged formation but beautifully stable. After this the ridge was regained, and we toiled up its loose crest and round or over its detestable gendarmes till evening found us at 17,600 ft. The ridge then steepened considerably, and a reconnaissance showed that apparently there was no suitable place farther on for a camp. So we had to be content with a little platform just sufficient to hold two Meade tents. The Sherpas and Gurkhas were sent down on the rope to Camp I, with orders to return next day; and after making all snug and setting the Meta to work, we had leisure to enjoy the really magnificent scenery.³ From this height Nanda

³ 'It was a glorious situation, finer than the similar platform Norton and I had built in 1924 nearly 10,000 ft. higher, because the mountains around, although smaller than Everest's satellites, were so much more fantastic and of such terrific slope; moreover, our old and ever more beautiful friend Nanda Devi was beginning to reveal herself and her N.E. face—the sight we had come to see and one which had never before been revealed to man. And a magnificent sight it was—8000 ft. of the steepest precipice two miles long, with a northerly spur of the mountain, of which we had only suspected the existence, carved into the most beautiful flutings by countless avalanches aided by the fierce Himalayan sun. . . . We had come, we had seen, even if we had not conquered—but above all we had seen, and the sight of that N.E. face of Nanda Devi was one I shall never forget; perhaps it is the finest mountain view in the world. But oh, for a "close-up" of it.' [Extracts from Mr. Somervell's notes.—EDITOR.]

Devi could be seen in her true proportions, and there could be no question of her sovereignty, even in that Court of giants. I doubt if an ascent is possible on this side; both the N. ridges appear to spring from faces of the most appalling steepness, up which even the eye of faith, with due allowance for foreshortening, could trace no way. The W. ridge, which leads to the main peak, was somewhat veiled in mist and cloud, but it held out no hopes. There must be few great peaks in the world guarded by such terrific defences. To the S.W. Nanda Kot⁴ lifted her glittering axe-edge to the sky; S. were the peaks of the Bambadhura and Panch Chulha ranges, overlooking a vast cirque of fluted design; and our N. horizon was the massif which forms the left flank of the Milam glacier, curving round towards the Untadhura pass, beyond which we could see certain black striated summits, standing guard over the Tibetan frontier. Close by, where the moraines point the way to the Untadhura, rose a peak of highly futuristic aspect. Opinions differed as to its claims to beauty, but we agreed to call it the 'dream mountain.'

The night was cold, and boots *will* freeze at these altitudes, even when kept inside a tent; so next morning's start was a joyless affair. We roped at once, for there was a good deal of ice on the steep rocks immediately above us. These surmounted, the sun came to our aid and we were able to tackle with fair enthusiasm the long series of gendarmes which now rose in front. We had to keep more or less to the ridge, as the mountain here falls away on both sides with some abruptness. The rock was deplorably infirm; this made an admirable excuse for slow motion; but all things come to an end, and eventually at 2 p.m. our buttress merged in the final summit ridge, and we were on snow. The aneroid showed 19,600 ft., and the experts estimated that we were not more than 600 ft. below the top. Beyond, to the right, rose a blunt snow ridge, of easy gradient, but heavily corniced on the N. side. Half-way up some step-cutting would probably be required; yet it was clear that most of our difficulties were behind us. However, the condition of

⁴ 'A wonderful view of the splendid snowy N. face of Nanda Kot filled us with admiration for Longstaff's attempt on it in 1905; Longstaff turned back 1000 ft. from the top [*A.J.* 23, 211] owing to the danger of avalanches, and it certainly seemed to us that the whole mountain was in danger of slipping down in snowy crashes at a much lower level than the place where Longstaff turned. But perhaps my experiences on Everest in 1922 have left me rather suspicious of snow in the Himalayas. . . .' [Mr. Somervell's notes.]



NANDA DEVI
from N.E., looking up Panchu Valley
(left 24,378 ft., right 25,660 ft.)



QUALGANGA KA PAHAR, 20,200ft.
from Milam.



Camp at 17,600 ft. on
QUALGANGA KA PAHAR.
"Dream Mountain" in background.
(Mrs. Rutledge and Somervell.)



ON QUALGANGA KA PAHAR.
View North from 17,600 ft. Digitized by Google

the party was not too good, and we had to be back at Camp I before night ; the order was wisely given for retreat. All went well on the descent ; the ice above the high camp was treated with due respect, and, rejoining our faithful porters there, we got down to Camp I at sunset, and to Base Camp next day, where Somervell just got over the snow-bridge before it fell in. 'Qualganga ka pahar' was undefeated ; but it had treated us well, had dropped nothing hard and heavy of its abundant store on our heads, and had given us some glorious views.

The first stage of our journey was now completed ; the time had come to move towards Tibet. We travelled down to Martoli again, and there regretfully bid good-bye to the Somervells,⁵ whose holiday was over. Though suffering from an attack of jaundice, he refused to give in, and declared his ability to get back to Almora under his own steam. It must have been a trying journey. The rest of us crossed over to Ralam, and had an interesting climb over the pass of that name into the Darma valley. This has been fully described by Colonel Wilson.⁶

CLIMBING THE KASHMIR MATTERHORN.

By C. R. COOKE.

FROM the valley of Kashmir the nearest and the most prominent peaks of the great Himalayan range are those of the Kolahoi group, and seen from Gulmarg they present a fine spectacle of two sharp rocky pinnacles rising 3000 ft. above the Great Icefield between them ; they are surrounded on all sides by glaciers coming down from the bases of the two peaks, fed from avalanches descending from steep snow slopes and corniches above.

The northernmost peak is that of Kolahoi itself, and rises to a height of 17,799 ft. above the level of the sea ; to the S. soar what have been termed the Twin Peaks, a height of 16,764 ft., their native name is Bur Dalau. The Twin Peaks

⁵ 'We did but little climbing, we attained no summit, but we had and shall always have as a memory, a real friendship with one of the most glorious parts of this best of all possible worlds.' [Mr. Somervell's notes.]

⁶ In a very interesting report which it is hoped to publish later.—
EDITOR.

were both climbed by Dr. Neve and Lieut. Mason in 1910 after a number of determined attempts over a period of nine years. Dr. Neve has described some of his efforts in his book 'Beyond the Pir Panjal.' He was very much handicapped by caprices of the weather.

Lieut. Battye and I had decided at very short notice to make the attempt, and accordingly preparations were made to the best of our ability. They were necessarily hurried, because we feared the advent of bad weather with the monsoon, and my leave was short.

We camped at Pahlgam, some 11 miles as the crow flies from the summit of Kolahoi. We set off the first day walking 2 miles up the valley of the E. Liddar, where we branched off up a side valley and ascended to the Korapathar Pass (11,668 ft.). We had been walking all day in showers of rain, but a rift in the clouds gave us a view of our Twin Peaks. It was, I think, quite the most awe-inspiring sight I have ever seen, and was our first view of Kolahoi: its precipices rising from amongst glaciers covered in fresh snows, its summit just hidden in cloud, and the crags between swathed in a mist of blown snow. At the sight of it I admit I turned to Lieut. Battye and said, 'Small hopes of our ever getting up there.' From the pass we dropped down to our first camp near Naffron, on an island in the middle of the Naffron Nag.

The following turned out a perfect day. Coolies were despatched to collect firewood and brushwood, Battye and I made charcoal for the fuel to be used at the highest camp; meanwhile the remaining coolies had been despatched, with their loads, to the next stage. That afternoon the fuel supply party set off up the valley and ascended by a snow couloir to a pass of 12,729 ft., over to the frozen lake of Har Nag, pitching what was to be our base camp (12,300 ft.). Here the valley should normally have contained green pasture but, owing to the lateness of the season, it was covered entirely with snow, except for one small patch of grass upon which we encamped. The coolie loads were arranged as follows: 1 and 2, tents; 2, 3, and 4, clothes and bedding; 5 and 6, stores; 7, cooking utensils, etc.; 8, 9, and 10, firewood, charcoal, and brushwood.

Next day five of the coolies were dismissed (at a rate of 10 annas per day each), the bearer was left in the camp to cook further supplies and look after the camp, while we (with the small servant's tent) set out *en route*. The rest of the party spent a tiring day following our route towards the

icefall. At about 5 o'clock in the evening we found that the route had been missed; we were then high up on a snow slope—the icefall somewhere above us. There was, of course, no shelter anywhere, so we pressed on until we came to a small patch of rock projecting from the snow, upon which our third camp was pitched at an altitude of 14,700 ft. Actually, we think, that possibly this route is more direct than the other. The brushwood proved invaluable for preparing a soft place upon which to lay the sleeping-bags. We had difficulty in obtaining water, as it got dark soon after our arrival, and the only available trickle of water froze hard. This meant melting snow over a fire that refused to burn, much less give any heat! Feeding under such circumstances is always a problem, the only pot of jam being found to have emptied itself into the bottom of someone's haversack, and tin-openers left behind. A pair of pliers of mine did excellent work instead; however, our wasting strength was retrieved by large quantities of lukewarm stew eaten out of a Brooke Bond's tea tin. That night can hardly be described as a comfortable one; it was very cold, the rocks underneath were working their way through, and worst of all, it became so cold that we were obliged to let the coolies come in out of the wind; nor did they forget to bring any of their pets!

In the morning I became the victim of an attack of mountain sickness, and on our way up the snow the glare of the sun made matters worse in spite of two pairs of snow goggles. The way we chose led in zigzags up the slope to the foot of the fall; its appearance was distinctly disappointing, as it was covered in snow. This fact, however, saved us a great deal of step-cutting (a slow and laborious task on hard ice). Presently we arrived out on to the top of the fall and found ourselves on the edge of the snowfield, the view of the snow-covered giants of the great Himalayan range became more and more magnificent as we came up on to the snowfield. Two hours' trudge brought the little party to a small rocky ridge, upon which the site for our highest bivouac was selected. A rough platform was made of rocks and stones, and the tent pitched as soundly as possible. Battye did all this work himself as I was still unwell.

The coolies were sent back to the base camp with instructions to return on the fourth day. We devoted most of the following day to straightening up the camp, padding our hats against the rays of the sun, and in making general preparations for the attempt on the morrow. We also examined our mountain

through glasses. It was looking quite inviting as compared with its forbidding aspect of two days ago. A trip was made across the snowfield above which soared the summit of Kolahoi a couple of miles off, the positions of the various crevasses were noted, bearings were taken by compass across the snow, and a general plan of attack framed.

Early next morning, by the faint light of oncoming dawn, two tiny black specks might have been seen steadily moving in a straight line across the snow. Actually we made excellent progress over this part; the hard crisp snow carried our weight, and an hour's fast walking brought us to the foot of a long couloir amongst the blocks of snow that had been brought down in an avalanche. By 6 A.M. we had ascended to a boss of rock upon which, after a light breakfast, we left a hurricane lamp and spare blanket. As we were doing this, the sun rose, amidst the most beautiful colouring, on the tops of the mountains on all sides.

Here we roped up and started on the rest of the climb. The first part consisted of a steep ridge of snow with occasional rocks jutting out; to the left ascended the long couloir over half-way to the summit, and a smaller couloir on our right. After 200 ft. of climbing the couloir on the right was crossed, one man only moving at a time, the other belaying the rope with his ice-axe.

We now found ourselves on living rock, up which we climbed to the extreme edge of the arête. The rocks here had been much broken by the action of the weather and we were able to find a greater variety of foot and handholds, also numerous good projections of rock for belaying. We paused for refreshment, consisting of dried prunes and ginger nuts, though neither of us felt the least inclined to eat. The sun even at this hour was very strong, and in spite of our extra head protection was starting my old headache; yet curiously enough it was not at all hot, presumably due to the coldness of the air.

As we advanced we found the rock work steadily getting more difficult, causing us much delay, until about 10.30 A.M. a big gendarme loomed above us. Almost the first thing that I noticed the day before when I looked at the ridge through glasses was the obvious difficulty of this bit. We rested and held a council of war. The arête all the way up had been very steep, and rock-climbing up it, though presenting no very great difficulties, called for a certain amount of nerve, for on its near side the rocks fell away at an average angle of over 50 degrees, with steep patches of snow scattered about, while on

the other side we looked down as we climbed over an almost vertical precipice of hundreds of feet of rock, too steep for snow to rest; below this steep rock slopes descended to the Kolahoi Glacier itself.

The weather was perfect, and around us on all sides, as far as the eye could see, stretched range after range of the Himalayas. To the N., over a hundred miles away, stood the giants of the Karakorums, Nanga-Purbat, K2, etc., 26,669 and 28,250 ft. respectively. Eastwards the eye was confused by a jumble of not merely snow peaks, but of snow ranges leading up to the peaks of Nun Kun (23,490 ft.).

Having settled on a plan, Battye took the lead, while I paid out carefully 60 ft. of rope round a sound belay until he had skilfully negotiated the first difficulty, then I followed while he belayed. In this manner our obstacle was finally passed; it took us altogether three hours to get over it and back on to the arête above. It involved a stomach traverse and a short hand traverse, during which I got mixed up in the two ice-axes and nearly fell; I should have been severely bruised as the rope at that point was out at right angles.

Once on the ridge the pace improved, small détours had to be made to avoid corniches, until we arrived at a point where the only course was to cross the top of a small couloir where the snow lay at a great angle; on the other side of this we halted.

It was now getting on for 3 o'clock in the afternoon. It had taken us nine hours to ascend 1500 ft., and the summit lay still nearly a thousand feet above us. Furthermore, we could see no immediate means of getting past a formidable looking rock before us, and were in no mood for more strenuous exercise at this altitude, so reluctantly defeat was admitted.

Coming down it was decided to avoid the gendarme altogether, and we were fortunate in finding a much better route down the rocks on the W. side of the long couloir. Moreover, when the sun left us we were able to save time by glissading down what in the daytime was the track of an avalanche, and at 6 o'clock reached the lamp, blanket, and extra clothes dumped in the morning, and so back across the tiring snowfield to camp and bed.

The following day was spent in eating and reviewing our luck; our failure was largely my fault, because my headache and sickness had made my going very slow, and we determined that another attempt should be made. We had followed the

route taken by Dr. Neve in 1911.¹ He had very kindly sent us an outlined description of his route, which we followed as nearly as possible right to the base of the peak ; but from there we had decided not to risk the long couloir up which he went, as there appeared to be considerable danger from avalanches. However, it was borne upon us that if the mountain were to be climbed the couloir would have to be risked at the safest time of day, *i.e.* in the early hours before dawn when the snow is frozen and least likely to avalanche, thus so as to save time up the first half of the climb.

Accordingly, when the coolies arrived next day the situation was explained, and they departed with instructions to return in two days. The rest of the day was spent in preparation. I took some photos of the snows. There was considerable anxiety about the weather; the valley of Kashmir was seen to be filled with clouds which were moving rapidly towards us, pouring over passes and filling up the valleys below us, and we feared that we might be done out of our last attempt.

Next morning we were off early again, though not as early as we should have liked, making good pace over the snow-field, complete with haversacks, water-bottles, a 60-ft. rope, ice-axes, wearing our wind-proof clothing, underneath which were all the sweaters that we could raise—I, with two pairs of gloves on, carrying the lantern. Our total equipment weighed a good deal, as it included my camera, compass, spare rope, brandy flask, maps, etc. Kit not required on the actual climb was dumped at a rock at the foot of the long couloir; our new route took us up it, kicking and cutting steps in the hard snow. The improvement in pace was encouraging, and not until the sun rose when a third of the couloir had been climbed were we obliged to take to the rocks: even then we managed to save time in avoiding difficult rocks by going up the side of our couloir. Such was our progress that at 10 A.M. we had reached the highest point of our previous effort and halted to rest and eat a few prunes and chocolate, though I was still feeling disinclined for food. We had, of course, been halting at frequent intervals all the time, for at these altitudes we found breathing hard work, in spite of the fact that we took care not to make any violent sudden exertion. The big rock fortunately proved to be much easier than was expected, and with a little delay was safely passed, from whence the going was almost entirely along the knife-edge of the main arête

¹ *A.J.* 25, 679-83.



Phot. C. R. Cooke.

BUR DALAU
from the High Camp.



Phot. C. R. Cooke.

KOLAHOI AT SUNSET
(showing tracks).



Phot. C. R. Cooke.

ABOVE THE GREAT ICEFALL.



Phot. C. R. Cooke.

KOLAHOI
snow field and high camp.

which led us right up to the summit. Détours were made past occasional dangerous-looking corniches—one small but decidedly uninviting little snow slope had to be crossed, until finally we found ourselves under the snow cap which covered the summit. From this point the giant corniche could be seen to advantage, with its icicles hanging down like the fingers of a huge claw. Walking on 30 yards up snow, we arrived panting to the top; we paused and looked down, saw masses of cloud gathering and rising round the base of our peak. We photographed one another and set off downwards at once. There was no time to appreciate the wonder of the situation, and my head was troubling me.

At 1.45 p.m., having rested well on a slab of rock just below the snow cap, the descent began. We set about the task, wasting no time, even for rests; very little conversation passed, except for the usual shouts of 'Come on,' after the rope was belayed and the warning '2 ft.' from the belayer when he had nearly paid out all his rope. Our rope gave us great assistance in coming down, as the leader was able to swing on it instead of waiting to find foot and hand holds. 4.15 p.m. saw us at the top of the long couloir, and from this place the descent was made in the same manner as that of our first attempt. The sun left the snow at 5.20 p.m. and allowed us to glissade, in three-quarters of an hour, right to the bottom. Battye stopped at the dump to change his socks as his feet were suffering from the cold, so I collected my share of the load and went on to prepare a fire in camp. As usual the snow-field seemed absolutely interminable, the softness of it made it seem as if I was walking up a steep slope all the time; looking back, we could see clouds piling up round the mountain, the summit was completely enveloped, and I realized that it was the beginning of a spell of bad weather, which in all probability would last many days. We were lucky to have snatched that last opportunity.

That night we feared that our tent complete with its contents might be blown away. A certain amount of sleet began to fall, and we were thankful that we were leaving next morning. We sent the men with their loads down to the base by the route we had come. Battye was very keen to have a look at the glacier, so we followed the direction shown on the map, keeping to one side of it. Lunch consisted of tinned ham eaten on a moraine. Below the glacier we struck the Har Nag Valley, up which we turned, leaving the huge mass of séracs and crevasses up on our right.

After a night at the base the weather broke. However, we felt no fears for mountains, and crossed the pass of Dunderan Gulu (14,120 ft.) in rain and cloud. We descended on the other side into the valley of the E. Liddar river, and camped at a place called Tanin, 5000 ft. below our pass. It poured with rain all night; we woke up in the morning with water dripping on us through the tents. The task of striking tents that morning was a decidedly wet and muddy one—not that we minded what happened. Three hours' marching in drenching rain saw us wet, smiling, and bearded, back in Pahlgam.

Two days later a rift in the clouds afforded us a glimpse of Kolahoi, and we could see that everything above 14,200 ft. was covered with deep fresh snow.

A word about expense; on this occasion my total expenses, including everything for the three weeks' holiday, were under Rs. 250 = £17. There are, of course, no guides in the Himalaya, which makes the sport all the more satisfactory and, incidentally, cheaper.

MOUNT OLYMPUS.

By W. T. ELMSLIE.

(This ascent was described in a paper read before the Alpine Club, March 1, 1927, by C. M. Sleeman.)

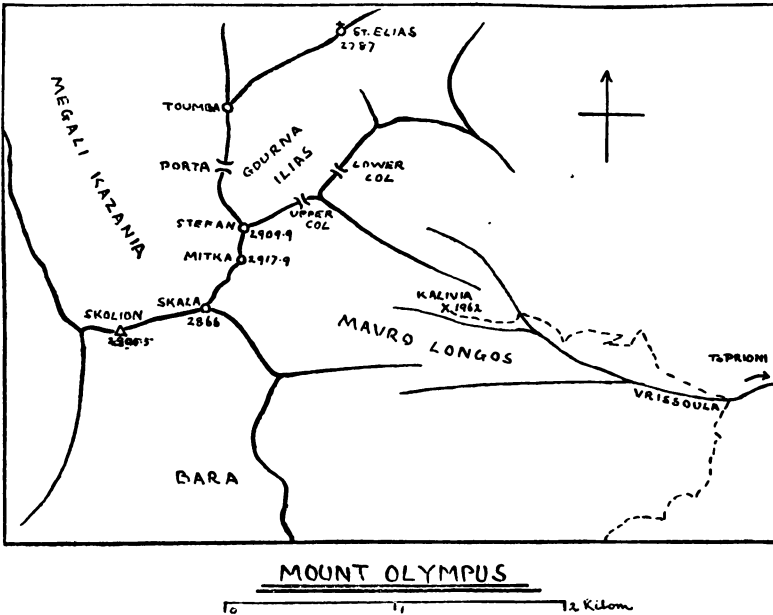
IN the early afternoon of September 1, 1926, we found ourselves at the station of Litokhoron, after a journey of five hours from Salonika. Our party, which consisted of C. M. Sleeman, A. E. Storr, L. A. Ellwood, and myself, had reached that city from Sofia by way of the summit of Musalla (2984 m., the highest summit in the Balkan Peninsula), the interesting monastery of Rila, and the valley of the Struma.¹ Our next objective was the summit of Mount Olympus, now hidden in dense white clouds.

From the station, which is situated on the very shores of the Aegean Sea, we had expected a trying walk in the heat of the day to the village of Litokhoron; for we had learnt from Marcel Kurz's excellent monograph on Olympus that a mule track only led to the miserable village, and that no mules

¹ The railway marked in the 'Times Atlas' between the Petrich line and Vetren does not exist.

were ordinarily available at the station. To our amazement, however, we found there no fewer than three motor buses. During the last few years Litokhoron has become a great health resort, especially for the tubercular; accommodation is found for the visitors in the houses of the villagers, and at the monastery higher up the valley.

Having bumped our way up to the village, we made ourselves at home in the restaurant, under branches of trees spread to give shade to the patrons of the establishment.



Immediately in front of us a deep valley opened between high limestone cliffs; and far up this valley the mists still hid the highest summits of Olympus. Between us and the sea was a long gradual slope, consisting of stones and sand, here and there covered with brushwood. In either direction this stony waste stretched for some distance between the mountain and the sea.

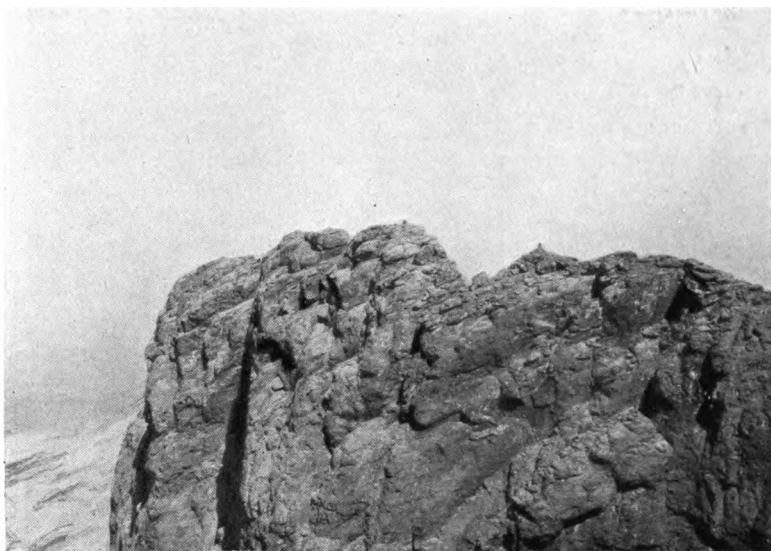
We spent the evening in making arrangements for the next day. A muleteer was secured to convey us and our baggage up to the 'Kalivia' whence the ascent is usually made from this side. It was decided that he should return the same day, and we agreed to pay him about £1 for his services, two mules being provided. He spoke fair English, having been in

America ; and we found him quite satisfactory. His name is Nick Jurgouras. We spent the night in a primitive, but spotlessly clean house, belonging to one of his friends. We were advised to send for Kristo Kakalos, the guide who accompanied Baud-Bovy and Boissonnas, as well as Kurz and most other parties, to the summit ; but we preferred to make the attempt alone.

The stars were still shining when we set out next morning at 5 o'clock. The track followed was anything but direct ; we descended some distance in the direction of the sea, crossed the stream, and gradually worked round from a northerly to a westerly direction. We were informed that there was no practicable route directly up the valley. Presently we passed the Wallack village mentioned by Kurz, and almost immediately began to rise steeply. It was a memorable sight when 'rosy-fingered dawn' lit up the sea and the land, with the high cone of Mount Athos just visible far out to the eastward. On the slopes of Ossa, beyond the Vale of Tempe, it was raining heavily, and we feared that the storm would extend towards us ; but as the sun rose, the rain and the clouds disappeared.

At 7 we reached the fountain of Stavros, where we filled the water-bottles, and where the mules drank from the hollowed tree trunks arranged there for the purpose. The fountain is situated on a subsidiary ridge of the mountain, and after leaving it the path winds back through the trees into the valley of the Vythos, high above the bed of the river. From this point the track rises and falls, turns right and left, but on the whole keeps on fairly level, in the direction of Olympus itself. The summit, known as Mitka, and the Throne of Zeus, or Stefan, are two fine craggy heights which rise above everything else. To their left is a rocky ridge, which after rising slightly to the point called Skala, falls away into the high plateau of Bara.

Those heights bounded our view up the valley. Behind us the stream made its way through a rather fine gorge, beyond which the sea appeared. The sides of the valley were steep and well-wooded, with occasional limestone crags on the slopes. Far below us to the left was the stream ; and presently we came into sight of the red roofs and white walls of the monastery of St. Dionysius, down among the pine trees in the bed of the valley. Whilst we were breakfasting beside the track our muleteer plucked some stalks of a plant about eight inches high, with green leaves and yellow flowers, and informed us



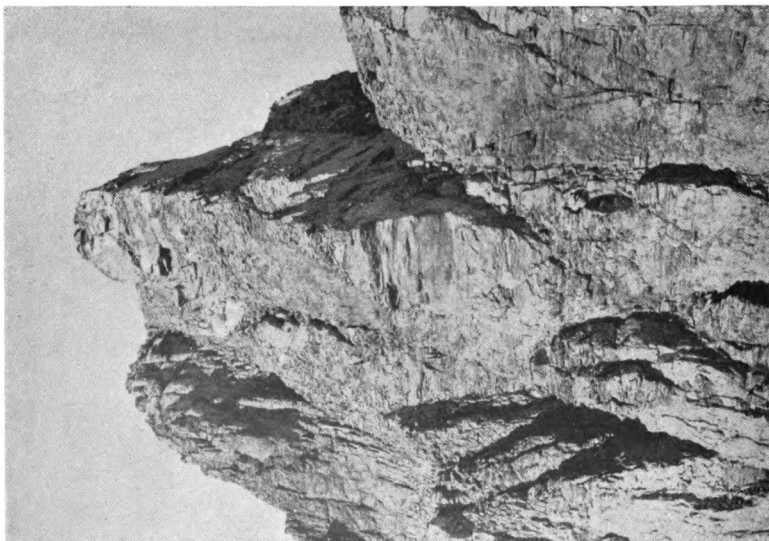
Phot. W. T. Elmslie.

THRONE OF ZEUS FROM MITKA.



Phot. W. T. Elmslie.

MITKA FROM THRONE OF ZEUS.



Phot. W. T. Elmslie.

MITKA

from N. Ridge.



Phot. W. T. Elmslie.

SKOLION

from MITKA.

that the tea we had drunk at our night quarters was made of an infusion of this plant. The taste was peculiar, but not unpleasant.

The meal lasted but half an hour, and we continued along the track towards Prioni, where a sawmill is marked on the map. We reached it at 9.15, but found that nothing remained of the buildings save a small piece of wall, hardly even useful as a shelter from the wind for bivouackers. The wood is now apparently taken further down the mountain on mule-back, for we met several mules so laden.

At this point two or three valleys meet ; and as mists had now descended on their flanking hills, the white crags rising from the trees were quite impressive. There was a trickle of water in one of the stream-beds, but the proximity of a large flock of goats had polluted it. These strong-smelling creatures, jet black, were eagerly munching 'pale green grass and nettle tops' among the rocks, under the care of a filthy little urchin, whose ragged garments matched the goats in colour and in every other respect.

A short distance higher up, we left the track to descend into a fine gorge, where two or three streams of delicious ice-cold water gush out from the crags, and after uniting their forces fall down the gorge in a series of cascades, only to disappear again underground almost immediately. Here we found a picnic party from the monastery already established ; they were accompanied by one of the monks, who wondered if we had any such water in England !

The mist on the upper crags, which flanked our valley, made it difficult for us to be sure of our whereabouts as we proceeded ; but when we had passed two or three likely openings on our right, and began to rise up the left (south) flank, we were convinced that Nick was leading us astray. He was, however, so insistent that there was no mistake that we allowed him to lead on till we came to a clearing in the trees, when we saw our mountain away across the valley to the north. Close beside us were some rough huts ; and these, insisted the muleteer, were our destination. Further enquiry elicited the information that 'Kalivia' simply means 'huts,' so that he had naturally led us to this, the principal hutment on this side of the mountain. (The point which we had reached is marked 1860 on Kurz's map. Nick spoke of it as 'Vrissoula Kalivia'.)

We could now make out what must undoubtedly be the site of the Kalivia referred to by Kurz as a suitable starting place

for the ascent of the mountain ; it was considerably above our level, and high up a branch valley to our north. We decided at once that we must reach it ; for clearly the summit was almost, if not quite, unattainable from our present position in one day, owing to the wide detour that must be made through woods to gain the plateau of Bara, and so upwards. Our muleteer urged us to remain where we were, as we should be comfortable in these huts, whereas the Kalivia of Mavrolongos were in ruins, and there was no water to be had. This was rather serious ; but we observed a patch of snow in a gully not far away from the other site, so decided to push on thither. We filled our flasks at the tiny trickle which the woodmen had captured, and set off again at 1 o'clock.

Two hours later we reached our destination, after a stiff and warm ascent on a poor track that gave the mules trouble in places. The muleteer was paid off, snow was hacked from the hard patch in the gully a few hundred yards away and stored in one of the waterproofs, grass and twigs were gathered to form a floor to our sleeping-quarters, and large quantities of dry firewood were collected. We decided to keep our fresh water for the morrow, and turned the snow into tomato soup and tea. The sun had long since been hidden by the heights above us, and now the distant sea was disappearing in the shadows of evening. The air was distinctly cool, and we accordingly turned in.

Our hut, the Kalivia of Mavrolongos, also called by the muleteer Kazania, may once have been a cosy dwelling ; now it was indeed a ruin. A few logs still made an apology for low walls ; and the roof beam still supported a few planks. But one corner of the roof had entirely collapsed, one wall had entirely disappeared, and the rest of the building was extraordinarily well ventilated ! We lit a roaring fire in the middle of the small apartment, and did not find the smoke at all inconvenient, so easily did it find its way out through the many spaces in the roof.

Most of us at one time or another have pursued the sweet nymph Romance, only to find her ever just in front of us and out of reach, like the carrot dangled in front of the donkey. Occasionally we have thought to grasp her, only to find her slip through our fingers when we thought she was secure. But that night, high up on the very abode of the gods, which they were there to take by storm, four Englishmen caught and kept her. Never shall I forget the sight as I saw it from the corner where I lay ; the red glow of the fire, as it lit up the

rough logs and planks of our low hut ; the sparks flying up in their thousands through the gaps in the roof above ; the stars shining down through the branches of the tree above us ; and the forms of my companions stretched out on the ground, save when one would rise to add a fresh log to the blaze. . . . The nymph was certainly there as I lay dozing ; but when the faint light of dawn crept up from the sea, she had disappeared.

The fire had gone out, and the morning was chill. I remember nothing about breakfast, except that it was as miserable a meal as mountain breakfasts before sunrise invariably are ; and it was only as we began to ascend the hillside that the stiffness and chill of the night were forgotten. We crossed a gully to our right, as we ascended, and worked up through woods and over steep scree-covered slabs, till at 7.15, after advancing for an hour and a half, we stood on the 'lower col,' Baud-Bovy's 'col of St. Elias,' which leads to the remarkable circular depression, called Gournia Ilias. To the right, from Porta to St. Elias, were for the most part grassy slopes ; but to the left the Throne of Zeus rose in an immense unclimbable wall. This wall, level at its foot, was in the shape of a Norman arch above ; the ridge on the right, or north, being probably unclimbable like the face, and certainly very long. We discovered later that the crag is composed of very friable limestone ; so that the slabs and gendarmes on this ridge would be doubly formidable.

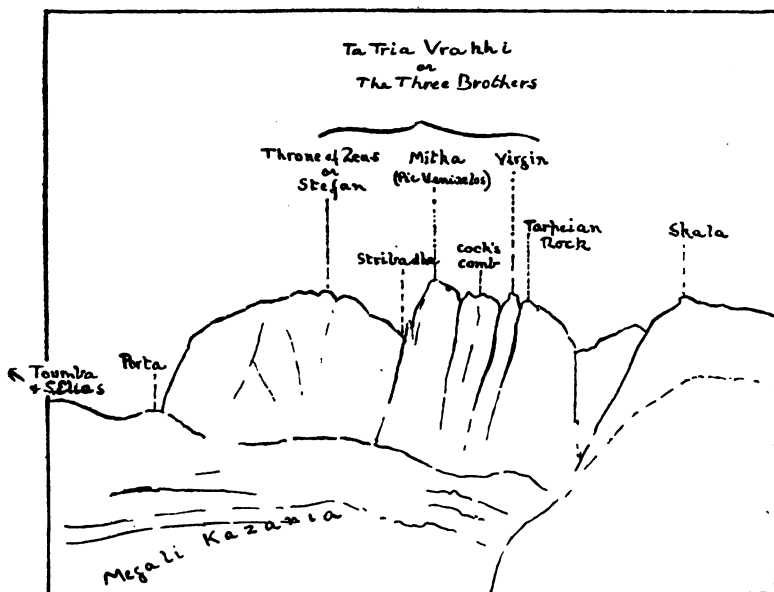
Our route lay up a ridge to the left, which brought us to the very foot of the crags at the 'upper col.' We were unable to tell from this position which was the Throne of Zeus (Stefan) and which Mitka (the highest summit) ; so determined to ascend a broad gully immediately before us. This was quite easy, though full of loose scree, and brought us on to the ridge at the gap (Stribadha) between Mitka and Stefan.

The view from here was most imposing. On the far side of the ridge the crags of both peaks were almost perpendicular, and fell in enormous precipices to the screes far away below. We noticed no single weak point in the defences on this side. Beyond were the almost equally impressive crags of Skolion, deeply furrowed, however, by numerous parallel gullies. And out beyond again, the valleys and hills of Thessaly.

We attempted first to climb the ridge on our left which led to Mitka, and ascended a considerable distance. The upper part of this ridge appeared to provide magnificent climbing, and a properly equipped party would find it a tough proposition, even if the rock proved sound. Unfortunately we had

with us only one short length of rope, for use in emergencies ; and being unwilling to divide our forces, we retired from the attack.

The ascent of Stefan from the gap is very much more easy than it looks. As far as the first summit there is no difficulty at all ; the slabs to be ascended are all at an easy angle, and the hands need only occasionally be used. Between the two summits the ridge becomes quite narrow ; and some care is



The West Side of the Main Summits of Olympus

required at a steep little step where the rock is somewhat unsound. We stood on the summit at 9.40 and came to the conclusion that Zeus must not have required much room to move about ! The names of Kristo Kakalos and Kurz were inscribed on a slab near the cairn which they built ; but no signs were apparent of any other party having made the ascent.

Returning to the gap, we descended our gully again, traversed round the mountain a short distance towards the south, and ascended another wide couloir, which led almost to the actual summit of Mitka. The scree in this couloir was extremely loose, and when there are other parties in it the greatest care would have to be exercised to avoid an accident. Apart from

this its ascent is perfectly simple ; and at 11.30 we stood on the highest point of Olympus, with not a cloud in the sky.

The view is, of course, very fine, and, on a really clear day must be magnificent. We could see as far south as Parnassus and the adjacent heights ; but the crags of Olympus itself took most of our attention. The ridge from Mitka to Skala looked by no means quite easy, and we regretted that we had no time to try it ; from Skala to the much higher Skolion the ridge was a simple walk. But the crags which fell in one unbroken semicircle on the western side, from Skolion right round to Stefan, were the most impressive part of the panorama and gave to the mountain a character quite its own.

We spent some time on the summit, and made a note of the various names inscribed on the rocks. We ourselves left cards in a tin, from which we first extracted the contents in the form of a delicious tongue ; and, having refreshed ourselves in the cool breeze which blew from the west, and scorched ourselves in the sun which beat down upon us, once more entered the loose couloir, and descended to the upper col.

There was no difficulty in making our way along the ledges beneath the crags of Stefan, past Porta, below Toumba, and up the grass and boulders of St. Elias. This summit is crowned by a small shrine, surrounded by an enclosure like a sheepfold ; and in the shrine climbers sometimes sleep. We found the names of some well-known British mountaineers. There is, of course, no water to be had, and no snow for a considerable distance. Yet the little dark building, with its roof of flat stones arranged in cantilever fashion, and its dirty ecclesiastical properties, would doubtless give very acceptable shelter to those who wished to be early on the dolomitic crags of the higher summits of the mountain.

Our supply of water was now done, and our throats were parched ; so it was decided to try to reach the monastery before nightfall, instead of sleeping again at the Kalivia. We picked up our spare kit as we descended ; hurried down the valley, by the way which we had followed the previous day ; and at length reached the springs above Prioni, where we bathed, ate, and tried to quench our thirst.

It was dark when we left the main track to descend to the monastery ; but we picked our way down through the trees till the welcome light of an open door in the monastery wall appeared before us. Entering, we wandered through a courtyard, and round a wooden gallery, unable to find any inhabitants. Presently we descried a light beneath a door, and

knocked. The room was full of tobacco smoke and a babel of voices. We asked if anyone could speak English. 'Guess you've hit on a British subject right here,' came a voice; and a native of Litokhoron, who had become naturalized as a Canadian but was now here on holiday, stretched out his hand.

We were taken to the principal guest-room, whose furniture consisted of dark cloth laid on bench-like divans, and an occasional dirty cushion of the same material; and were soon regaled by the monk whom we had met the previous day, with sardines, coffee, and water. As each glass was half drained the good man would empty the contents over the wooden floor—swish!—and fill up again for us. Meanwhile all the visitors came to look at us, and to talk through the medium of the Greco-Canadian. We were told how St. Dionysius tamed a bear, and with its assistance built the chapel of the monastery; how he cleared the mountain of bears; and how he caused a fountain to gush forth by striking a rock. Our informant admitted that he was a little sceptical on these matters, but added that they were very improving stories, and at least ought to be true.

Next morning, after sleeping on the hard divans, we were up betimes. Ablutions were performed in a manner new to us. Outside on the wooden gallery was fixed a square board with a hole in the middle. The hands were placed above this aperture, and one of the monks poured water over them. It fell into the courtyard below. Having performed this ritual, and that of drinking Turkish coffee, we pushed on to the fountain of Stavros, where we had a real wash and a real meal. Thence down to Litokhoron, and by motor bus to the station, where we had two hours to wait for our train, and occupied them most delectably in the Aegean Sea.

In misty weather, and most days appear to be misty on the top, Olympus would present serious difficulties. We were extremely fortunate in having a clear day for our ascent. On the other four days when we were in sight of the mountain, there were clouds on the summit all day till sunset. Those who ascend the mountain should make sure of a good supply of water. The springs are very few and far between, and would hardly be found without assistance from the inhabitants. In some of the more sheltered gullies, and at the foot of the crags of Stefan, there was a little dirty snow; but on the upper rocks, as in Gourni Ilias, we found none at all. Firewood is plentiful at the level of the Kalivia; but those who desire to explore the upper crags more thoroughly would do better to sleep on St. Elias. Water, firewood, and blankets would have



Phot. W. T. Elmslie.

APPROACHING PRIONI.



Phot. W. T. Elmslie.

SKALA AND THE VIRGIN from MITKA.



Phot. W. T. Elmslie.

MONASTERY OF ST. DIONYSIUS.



Phot. W. T. Elmslie.

MOUNT OLYMPUS
from Vrissoula Kalivia.

to be brought. If mules can reach this point by way of Petrostrounga, there would be no difficulty in arranging this ; but they could not proceed further than the Kalivia on the Mavrolongos route.

We saw no signs of brigands here. Our muleteer told us that there were none now, as several had been killed the previous year. But a few days later we read in a Salonika paper that a robber chief in the Verria district had been killed, and his head brought thither as a trophy ; and Verria is close to Olympus, on the north-west.

The remainder of our expedition may be briefly summarized. After visiting the antiquities of Greece, and making the classical ascent of Parnassus, we travelled by way of Skoplje to Kačanik, for the ascent of Ljubeten. The height of this mountain is a vexed question, for it is given by various authorities as anything from 6400 to 10,010 ft. Actually, as we found by means of barometrical measurement, it rises to about 8090 ft. It was climbed without difficulty ; but on the descent we had a rather exciting encounter with a party of armed brigands (since captured or killed), who fortunately decided that we were not worth their serious attention, and ultimately allowed us to pass.

Leave Litokhoron . . .	5 A.M.
Stavros Fountain . . .	6.55 to 7 A.M.
Prioni	9.10 to 9.20 A.M.

(Halt of $\frac{1}{2}$ hr. for breakfast).

Detour to waterfalls . . .	9.35 to 9.45 A.M.
Vrissoula Kalivia . . .	12.30 to 1.05 P.M.
Mavrolongos Kalivia . . .	3.15 P.M.

(Halts 10 mins.)

Leave Kalivia	5.40 A.M.
Lower col	7.15 A.M.
(Halts $\frac{1}{4}$ hr.)	
Upper col	7.45 A.M.
Stribadha	8.15 A.M.
Return to Stribadha . . .	9.10 A.M.
Throne of Zeus	9.40 to 10.05 A.M.
Stribadha	10.35 A.M.
Mitka	11.30 to 12.45 P.M.
Foot of couloir	1.10 P.M.
St. Elias	1.55 to 2.45 P.M.
Kalivia	4.0 to 4.15 P.M.
Waterfalls	5.45 to 6.30 P.M.
Monastery	8.0 P.M.

Leave monastery . . .	6.10 A.M.
Join main track . . .	6.40 A.M.
Stavros Fountain . . .	7.40 to 9.0 A.M.
Litokhoron . . .	10.15 A.M.

N.B.—A party unaccompanied by mules might reduce the times of our first day considerably.

Note I. Maps.

The sheet 'Sofiya' of the International 1:1,000,000 map, coloured for heights, is useful to give a general impression of the Balkan Peninsula north of Olympus.

For the rest, the Austrian 1:200,000 map is the best available, along with its British counterpart. The sheets required are for Musalla 'Džumaja,' for Olympus 'Larissa,' and for Ljubeten 'Skoplje.'

For Olympus, Marcel Kurz's splendid monograph 'Le Mont Olympe,' published by Victor Attinger, Paris and Neuchâtel, is almost indispensable. It contains a large scale, 1:20,000, map of the high summits.

[The Anglo-Franco-Serb 'War Zone' maps (1:50,000) constructed during the War, by the respective Survey Companies, are excellent in all respects. They comprise the line (W. to E.): Pogradec-Struga-Monastir-Hill (so called) 1050-Sokol Heights-Nonti-Guevgueli-Bogdanci (Lake Doiran)-Beles Heights-Demirhissar-Seres-Neohori-Stavros, with a depth to the N. of about 5 miles and to the S. of 15-30 miles.

These maps include the Peristeri, Sokol, Beles and part of the Rhodope ranges, which, with Lakes Ohrida and Presba, contain the most interesting scenery in Macedonia and E. Albania.

The maps *might* be obtained at the War Office.—EDITOR.]

Note II. Exploration and Literature of Previous Ascents of Mt. Olympus.

The following is a brief summary of the exploration and ascents of Olympus:

W. M. Leake ('Travels in Northern Greece,' 1835, Vol. III. Ch. XXX.) gives much historical information about the lower grounds bordering Olympus.

D. Urquhart ('The Spirit of the East,' 1838, Vol. I. Ch. XXII.) gives a picturesque account of an ascent in July 1830 from the

Monastery of Sparmos of a summit which he calls St. Stephano. This may be Skolion or a spur of Skolion.

L. Heuzey ('Le Mont Olympe et l'Acharnanie,' Paris, 1860) describes an ascent which he made in the autumn of 1855 of a peak which he calls Itchouma (Kurz suggests Sarai). Afterwards he gained from Mavrolongos a point on the ridge of Gourni Ilias under the Throne of Zeus. Heuzey made a map of the mountain which is not characterised by accuracy. He distinguished three summits: Saint-Élie (N., which he thought the highest), Kaloghéros (central), and Itchouma (S.).

H. Barth ('Reise durch das Innere der Europäischen Türkei,' Berlin, 1864) went in October 1862 from Kokkinoplos to the summit of Skolion, and thence to Porta and the top of Saint Elias. He described the chapel on the latter peak, and knew that he was not at the highest summit of the mountain. He descended by Bara to the Monastery of St. Dionysius and Litokhoron.

H. F. Tozer and T. M. Crowder ('Researches in the Highlands of Turkey,' 1869, by H. F. Tozer). In August 1865, starting from Katerini, they went to the Monastery of St. Dionysius and ascended St. Elias. Tozer gives an accurate account of his expedition. He noticed that the highest summit was to the south of the Throne of Zeus and described it as having 'the appearance of a regular aiguille.'

Probably several ascents of St. Elias were made in the years following Tozer's visit.

J. Cvijić ('Grundlinien der Geographie und Geologie von Mazedonien und Altserbien,' *Petermann's Mitteilungen*, Ergänzungsheft 162; Gotha, 1908) made geological visits to the mountain in 1904 and 1905. He describes the positions of the main summits, and says that 'to the South of St. Elias rise up three pyramids like the Drei Zinnen of Tirol.'

E. Richter ('Meine Erlebnisse in der Gefangenschaft am Olymp,' Leipzig, 1911, also S.A.C.J., lvii.) made three visits to Olympus, in 1909, 1910 and 1911, each time in May. In his first visit he went from the Monastery of St. Dionysius to Bara and then ascended Palimanastri alone and descended to Aghia Trias. In 1910 he went up Kafenio from Zmeos, over Bara and descended to St. Dionysius. In 1911, returning from an ascent of Flamboro, his party was attacked by brigands, two of his escort were killed, and he was carried off and kept prisoner until August.

D. Baud-Bovy and F. Boissonnas ('Grèce Immortelle,' 1919, and *Geographical Journal*, lxxvii, 'The Mountain Group of
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Olympus : An Essay in Nomenclature'). On July 30, 1913, they went up St. Elias from Petrostrounga and descended to Prioni. On August 2, with Kristo Kakalos of Litokhoron, they ascended the highest summit of Olympus from probably the brèche on the N. side of Skala. They called the highest summit Pic Vénisélos.

A. E. Phoutrides and F. P. Farquhar (*Scribner's Magazine*, November 1915, 'With the Gods on Olympus') made an ascent of Skolion from Aghia Trias in April 1914. They went on to Skala, but no further. Good photographs of the mountain under snow conditions are given in the magazine.²

In 1918 an aeroplane flight over the group was made by Lieut.-Colonel Wood, R.E., and Lieut.-Colonel Todd, R.A.F., and in June of the same year Major-General Sir William Rycroft³ and Lieut. C. F. Meade ascended St. Elias from Litokhoron ('A.J.' 32, 326-8).

In July 1919 Baud-Bovy and Boissonnas stayed a week in the neighbourhood of Kalogheros. On July 21 they made their second ascent of Mitka.

In August 1921 *Marcel Kurz* surveyed the whole range of Olympus with a photo-theodolite ('A.J.' 34, 173). With Kakalos he made the complete traverse of the ridge from Skolion to the Throne of Zeus. This included the first ascents of La Vierge and the Throne of Zeus. In 1923 he published his monograph 'Le Mont Olympe,' which gives an exhaustive account of the history and exploration of the mountain. This book contains fine photographs and an excellent map of High Olympus (1 : 20,000), and also a general map of the district. The latter map is derived from the Larissa sheet of the Austrian 1 : 200,000 map of central Europe. It is not without inaccuracy,⁴ as Kurz comments. For a review of 'Le Mont Olympe' see 'A.J.' 36, 170-2. The book is invaluable to all who make a visit to the mountain, and renders the ascent a matter of no particular difficulty.

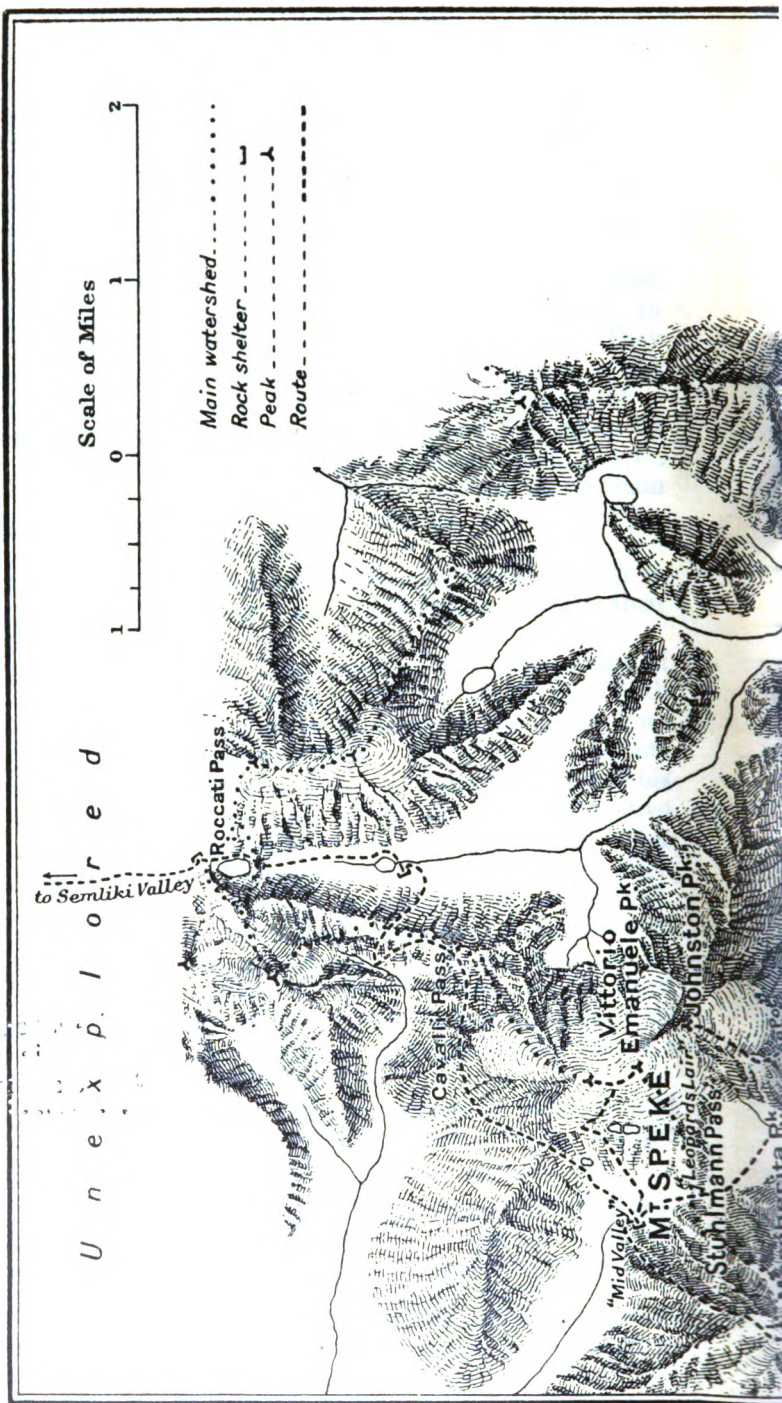
The following are others who have ascended Mitka, but of whose ascents there is no published account to hand : Giorgio

² Mr. D. W. Freshfield's paper on Mount Olympus in the *Geographical Journal*, xlvii, pp. 293-7, should also be consulted, although Mr. Freshfield himself was unable to approach the mountain in 1904 owing to the presence of brigands.—EDITOR.

³ (1861-1926). D.A. and Q.M.G., British Salonika Force.—EDITOR.

⁴ And all members of the late British Salonika Force will agree.—EDITOR.

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Kostandakos, July 20, 1920 (whose name Kurz found at the summit); F. K. Kuhn, Aug. 3, 1921; Winona Bailey, Seattle, U.S.A., Aug. 23, 1922; St. Kotsios, 1925; L. R. Frazeur, Chicago and Haliburton, N.Y., U.S.A. (no dates). The last five of these names, together with the words 'Pic Vénisélos,' we found inscribed on rocks at the summit. In 1923 Helmut Scheffel ('Eine antike Opferstätte auf dem Olymp,' *Mitteilungen des Deutschen Archäologischen Instituts Athenische Abteilung*, Band XXXXVII., 1922 (pub. 1924)) records an ascent to the summit for the purpose of archæological exploration. C. Jacot-Guillarmod (*Bulletin de la Soc. Neuchâteloise de Geog.*, 1924) gives some account of the geology of the Olympus district.

C. M. SLEEMAN.

RUWENZORI.

By G. N. HUMPHREYS.

(Read before the Alpine Club, February 1, 1927.)

SINCE the expedition of H.R.H. the Duke of the Abruzzi in 1906 until last year no fresh ground had been covered in the Ruwenzori¹ range and no peak climbed. In 1926, however, two small expeditions to the range were able to break new ground.

The first expedition left Fort Portal on January 30, and returned, nine days overdue, on March 9; it was jointly undertaken by D. Stedman Davies, Uganda Civil Service, E. H. Armitage and the writer. By the date arranged for the start of the expedition there had been collected at Fort Portal seventy outfits, consisting each of sweater, vest, shorts and blanket; also fifty extra blankets and fifteen sets of boots and stockings. In addition to this, food for the Europeans had been collected ready packed in convenient loads, and arrangements had been made for loads of millet flour to be ready at Ibanda for the native members of the expedition. The porters engaged at Fort Portal were replaced at Ibanda by Bakonjo and Batoro porters, and the expedition set out from Ibanda the day after its arrival there.

From the start it was clear that the porters collected at

¹ See, in general, *A.J.* 23, 386-92, with map facing 392.

Ibanda, although an exceedingly hardy set of men and accustomed to the valleys of the range which are their hunting-ground for hyrax, were out of hand and ready to desert at a moment's notice. This was partly due to the fact that it was known that the expedition hoped to penetrate beyond the limit of recent expeditions and partly to the fact that a recent expedition which ascended the Bujuku valley and returned by the Mobuku had encountered a snow-storm while crossing the Scott-Elliot Pass, with the result that four natives died of exposure.

The first night after leaving Ibanda was spent at Mihunga (Bihunga), the nearest inhabited spot to the snows and the headquarters of the British Museum expedition of 1905 and 1906; and the following three nights at the rock-shelters Nyinabitaba (Nakitawa), Kanyasabo and Kigo. It had been intended to spend the second night at the rock-shelter Nyamuleju, but the porters claimed that this shelter was haunted, and on arrival at Kanyasabo refused to go further that day. Nyamuleju, which was passed the next morning, showed signs of previous but not recent use; it was not however possible to obtain from the porters the reason for its abandonment. At Kigo the men refused to go on unless they were given outfits, although it was not customary to provide more than blankets for porters going only to the snows and back, and clothes had been brought sufficient only for such porters as it was intended to keep at the camp which was to be established near Stuhlmann Pass. It thus became necessary to leave a part of the stores at Kigo and to arrange that the fifty 'blanket men' should carry provisions between a base camp near Ibanda and Kigo, and that some of the seventy 'outfit men' should be sent back to Kigo for stores when they were required.

On the fourth day the expedition reached Bujuku rock-shelter, which was the last shelter known to the porters. Beyond this, at the foot of Mt. Speke, S. of Stuhlmann Pass, a rock-shelter was found in which were two unbroken native cooking pots but no sign of recent habitation. Beyond the pass, at the foot of Mt. Speke, the expedition discovered a shelter which showed signs of long and recent use by a leopard but not of human habitation. In the middle of the valley running N.W. from the pass another shelter was found which showed no signs of previous occupation. Climbs during this expedition were made from one or other of these three shelters. It had been intended to establish high camps as near as possible

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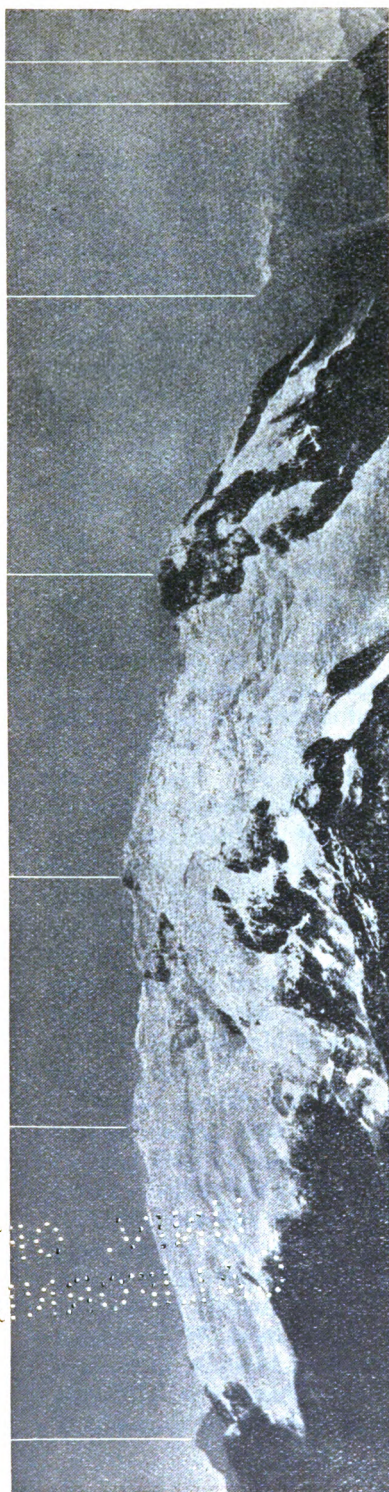
PORTAL PEAKS "TRIDENT" PEAK

JOHNSTON PEAK

VITTORIO EMANUELE PEAK

UNNAMED PEAK

MT. EMIN



Phot. G. N. Humphreys.

MT. SPEKE WITH MT. EMIN AND PORTAL PEAKS IN DISTANCE, FROM BELOW SNOWLINE
ON S.E. RIDGE OF MT. STANLEY.

MARGERITA PEAK

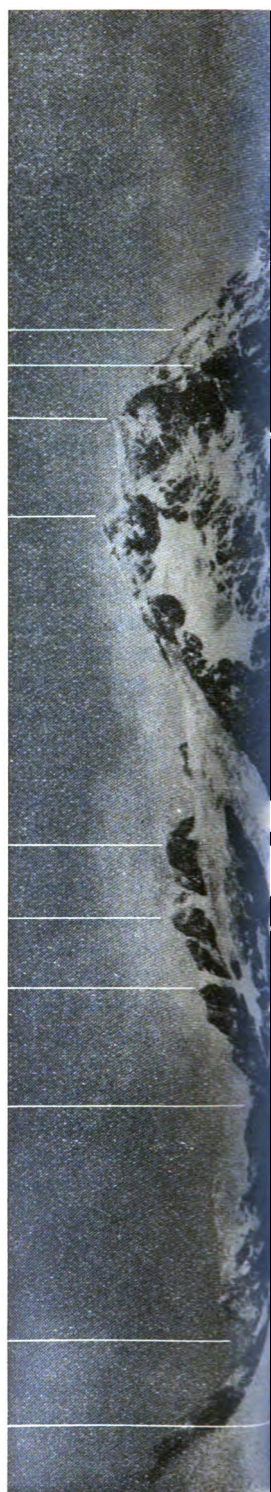
N.W. SHOULDER OF MARGERITA
N.N.W. RIDGE
N.N.E. RIDGE

SAVOIA PEAK

ELENA PEAK
MOEBIUS PEAK

MT. BAKER

N.W. RIDGE
OF MT. SPEKE



Phot. G. N. Humphreys.

MT. STANLEY WITH MT. BAKER IN DISTANCE, FROM N.W. RIDGE OF MT. SPEKE.

EDWARD PEAK

ELENA PEAK

SAVOIA PEAK

POSITION OF ALEXANDRA PEAK

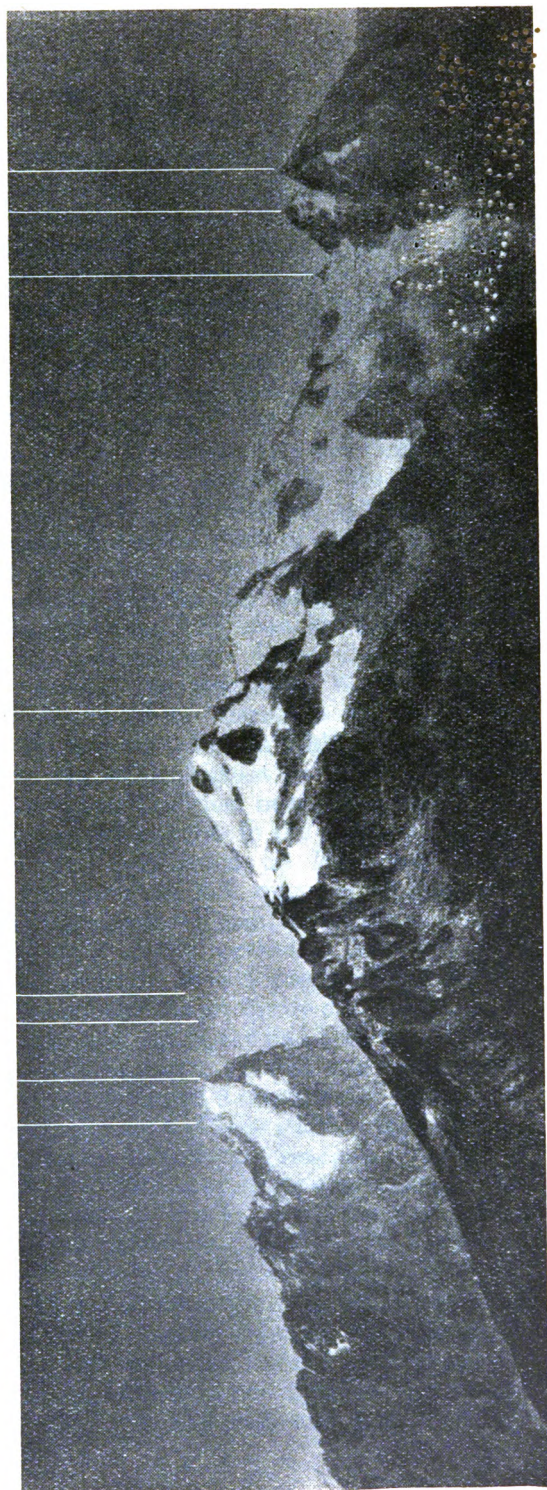
POSITION OF MARGHERITA PEAK

SEMPER PEAK

GRAUER ROCK

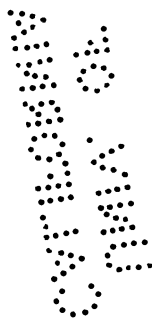
MOORE PEAK

WOLLASTON PEAK



Phot. G. N. Humphreys.

MT. BAKER WITH MT. STANLEY IN DISTANCE, FROM STAIRS PEAK, MT. LUIGI DI SAVOIA.



to the snow-line, and the boots and stockings had been provided for such porters as should carry tents and provisions to the higher level, but the porters being out of hand this was not possible. The disadvantage of making climbs from the valley was that it was only before dawn that the peaks were clearly visible. The necessity, moreover, of starting each day from the valley added considerably to the discomfort of climbing. The lower slopes of the mountains are covered with moss, under which is a layer of mud, and within a few minutes of leaving camp every climber was wet through.

The first objective of the expedition was the discovery of a route to the Twin Peaks of Mt. Stanley by one of the N. ridges. The easiest way to the highest peaks is from the S., but the N. slopes, being unexplored, were of greater potential interest. Below the N.W. shoulder of Margherita one ridge runs N.N.W. and another N.N.E. An ascent was made of this latter ridge to the foot of the N.W. shoulder of Margherita, where a precipice was encountered. Later the expedition crossed both ridges, reached the precipitous W. wall of the N.W. shoulder and descended to Alexandra glacier, which flows N.W. from the col between the Twin Peaks. This glacier offered an undoubted way to the highest peaks, but for such an ascent a camp should be established near the glacier W. of Margherita, and this was not possible in the circumstances of the expedition. No way was found up Margherita Peak between this glacier and the main N.E. ridge, which continues to Stuhlmann Pass and is part of the main divide of the range; but all climbs were made in almost continuous mist with only occasional glimpses which might show a possible route ahead, and a path may yet be found by some future expedition.

On the rare occasions when Mt. Speke had been visible from the slopes of Stanley the mountain showed two main peaks with a high ridge between them and a considerably lower peak to the S. The centre peak only had been climbed by the Duke of the Abruzzi, who named it Vittorio Emanuele; the name Johnston had been given to the lowest of the three peaks. The objective of the expedition now was to ascend the N.W. ridge to the peak at the N. and traverse the high ridge to Emanuele Peak. Twice the attempt failed on account of dense mist and heavy falls of snow which obliterated the steps which had been cut up to the high ridge. The third attempt was successful; no snow fell this day and the mist thinned sufficiently for occasional glimpses to be obtained in one direction or another. From the peak at the N., from Emanuele and from the ridge

between these peaks it appeared that the N. peak was slightly higher than Emanuele. At neither peak, however, was the visibility good enough for observations to be taken.

These climbs had been made from Leopard's-lair and Mid-valley shelters and the expedition now moved camp to Cooking-pot shelter, in order to attempt an ascent of Margherita by the N.E. ridge. Unfortunately, it was not possible to leave the porters to change camp without supervision, and the day employed for this purpose was the only fine day the expedition experienced while within reach of the snows, the weather being perfectly clear until the late afternoon, when it rained.

Attempts to reach the summit by the N.E. ridge were made during four days in continuous mist and frequent rain or snow; the party reached a point where a wide cleft in the ridge was plugged or arched over by snow, but mist, which prevented a view of more than a few feet ahead, stopped further progress.

Only five days now remained for climbing, and as the weather showed no sign of improving, these were devoted to attempts on the highest peaks by the route discovered by the Italian expedition up the S.E. ridge. Stanley plateau was reached without difficulty, and each day was spent on the snow-field waiting for the mist to thin sufficiently to show the direction of the Twin Peaks. It was not until the end of the fifth day, when the expedition was returning, that the peaks became visible through the mist.

The main divide of the range runs through the snow mountains Emin, Speke, Stanley, Baker and Luigi di Savoia. The passes between these mountains are Roccati, Cavalli, Stuhlmann, Scott-Elliott and Freshfield. Of these the first two had not been crossed; moreover, no expedition to the snows had crossed the range. The largest unknown area in the range lay to the N.W of the snow peaks. The objective of the expedition was now to cross these two passes and complete the crossing of the range through the unknown area.

After the first day the porters refused to go further, and it was necessary to abandon equipment such as tents and blankets and for each European to be content with what could be carried in a rucksack. Food taken was barely sufficient for four days, but owing to unforeseen difficulties on the way down the mountains, it became necessary to make this last for eight days. At the last moment six natives, carrying only their own food and blankets, followed the other members of the expedition. The total time taken on the journey from Stuhlmann Pass to

the foot of the range was nine and a half days, of which eight and a half were through unexplored country. Just S. of Roccati Pass a small lake was discovered. The lake shown in the sketch map illustrating the expedition of the Duke of the Abruzzi as being just N. of Roccati Pass was found to be in a small continental basin. N. of this pass two lakes were found, larger than lakes previously discovered in the range. Further N. a treeless plateau was crossed, the sole vegetation being two species of *alchemilla* growing 3 ft. high. N.W. of this plateau the valleys narrowed down to deep gorges, and for two days it was necessary to wade waist deep down a glacial stream at the bottom of a canyon. Emerging finally on to the track which skirts the W. foothills of the range, the expedition returned to Fort Portal over the Bwamba Pass, which crosses the N. spur of the range.

During the expedition clear weather was only experienced during two days, and on only one day was there a complete absence of rain and snow.

The second expedition was jointly undertaken in July by E. H. Armitage, by R. T. Wickham and N. F. Andrews of the Uganda Civil Service, and the writer. At the last moment the expedition was joined by J. Oliver, who took charge of the porters.

The porters who had deserted the February expedition were anxious for re-engagement and now gave no trouble, partly because the six natives who had crossed the range had been well paid, while the deserters had received nothing, and partly because the successful crossing of the range and the absence of casualties on the previous expedition had completely restored their confidence.

The same route was followed as by the February expedition. A camp was established for the porters at Cooking-pot rock-shelter, and on the same day a high camp was made on a suitable site which had been located during the previous expedition. This was a piece of level ground at about 15,000 ft. on the S.E. ridge of Stanley. At a lower level, S.W. of the ridge, the site of the camp of the Duke of the Abruzzi could be made out by an artificial arrangement of stones and by some firewood.

The S.E. ridge provides an easy route to Stanley plateau, and this was followed each day. On the snowfield, however, no progress could be made except when a fleeting glimpse of the peaks indicated the direction. Fortunately the falls of snow were not sufficiently heavy to obliterate entirely the tracks of the previous day, and for this reason it was always possible, despite the mist, to reach the limit of the previous day's journey

and there to await a thinning of the mist which might allow further progress. Margherita Peak was eventually reached by crossing Margherita glacier and ascending the N.E. ridge. A cornice just below this ridge and a more formidable cornice just below and N. of the summit were the only technical difficulties encountered. It would appear that the second cornice was avoided by the Duke's expedition, which reached the summit from the S. The highest point of the range was reached on July 19, just twenty years and a day after its previous ascent.

From Margherita the col between the two peaks was reached and Alexandra ascended by the steep slope leading from the col to the summit. The highest point of this peak is on a cornice which with overhanging rock forms the roof of a large cave, which might provide, in an emergency, a valuable refuge.

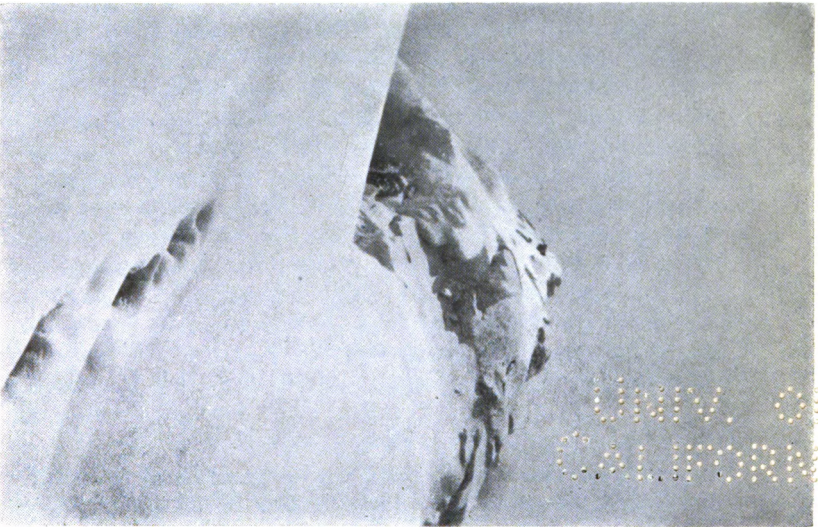
The next objective of the expedition was Johnston Peak, the third highest and as yet unclimbed peak of Mt. Speke. A high camp was established on the S.W. ridge, and an ascent made of an isolated rocky peak, S. of Johnston Peak, known to the expedition as Trident Peak from the shape of the summit. The next day, July 22, Johnston Peak was ascended without difficulty, except from dense mist and heavy falls of snow. The ascent was repeated on three following days in the unfulfilled hope of obtaining a view to the E. in order to determine the position of a peak which had been seen N. of Kigo rock-shelter and apparently E. of Speke.

Scott-Elliot Pass was next crossed by a route which, though it required an ascent to 15,000 ft., was easier for the porters than the route followed by previous expeditions. A camp was now established on Freshfield Pass, whence ascents were made of peaks Edward and Semper of Mt. Baker and Stairs and Sella of Mt. Luigi di Savoia. On these peaks cairns were found, and in those on Mt. Baker were records of the ascents of the Italian expedition.

The expedition returned to Ibanda by the Mobuku valley, visiting Moore glacier on the way. During the expedition the sun was only seen on one occasion for half an hour; rain or snow fell every day. During both expeditions fine weather prevailed at Fort Portal, and from the experience gained on these and other expeditions, it would appear that there is no relation between weather in the range and that of the surrounding country. Fine spells of weather have been experienced by previous expeditions, but it has yet to be shown that these are more likely to occur in one season than another.



Phot. G. N. Humphreys.
 Icicles hanging from highest cornice of
 Margherita Peak, Mt. Stanley.



Phot. J. Oliver.
 MARGHERITA AND ALEXANDRA PEAKS
 from Stanley Plateau, Mt. Stanley.

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NOTES ON THE EARLY HISTORY OF THE DENT DU REQUIN.

By J. P. FARRAR.¹

THE most fantastic feature on the Requin is the great Cheminée Fontaine.² This was first used, but as a *means of descent*, by M. Emile Fontaine with the guides Joseph and Alphonse Simond on July 25, 1898.

In note 3, 'A.J.' 38, 269, the words 'the chimney is said to have been ascended' brought a letter from Baron van Heemstra, late Hon. Sec. of the Netherlands A.V., pointing out that the *second ascent* of the great chimney was made on August 3, 1913, in 3 hours, by Mr. P. Kemper, a member of that Club, led by the Chamonix guide Jacques Tissay, with his younger brother Léonard as porter. The report is to be found in the *Journal* of that Club for 1913, pp. 80-81, and my thanks are due to Baron van Heemstra for translating the essential bits, which read :

'Looking aloft I wonder how we shall descend through the chimney, when Tissay, my tried guide, proposes to use it for the *ascent*. The first efforts to ascend the chimney, directly, fail. I climb after him, support him with shoulders, head and arms, but he caught no hold on the smooth granite walls. To the chimney's left is a narrow crack that pierces deeply in the rock. When it is possible to arrive at the highest and deepest part of this crack, you might, hanging on your hands, make a traverse to the left (*sic*), till you are again in the outer wall (Aussenwand). Following, very exposed, this wall in the same manner—now to the right—you can get again into the chimney and after that attain, half way, a jammed block. It lasts rather long before Tissay has conquered these difficulties, especially as the walls of the chimney are covered with ice which must be cleared off.

¹ The history and topography of this mountain are treated in great detail in the admirable monographic Vallot guide, *Les Aiguilles de Chamonix*, by Jacques de Lépiney, E. de Gigord and Dr. A. Migot.

² I know only one chimney equally fantastic, less difficult, but three times as high, viz., the great chimney on the E. face of the Rosengarten, first ascended by Raynor and Phillimore with Antonio Dimai and L. Rizzi in 1896.

'Before we can follow our leader, he has also to clear the second part of the chimney of the ice. We squat down behind the rock where a projecting part of the wall offers protection against the falling ice. At last the end of the second rope, tied by Tissay to the iron piton above the block, dangles down. We must climb now the chimney direct assisted by the rope. To give more rope to the guide I unrope myself, and it is first the porter's turn. Alone and forsaken I stay behind, hearing nothing of my invisible partners save the scratch of the boots and the laboured breath of Tissay, Jr.

'... Very happy I am when I see the rope's end and, supported by it, I begin to climb, but notwithstanding I need much time and enormous exertion to join the guide and porter. The jammed block has hardly room for two people; as soon as I arrive Tissay attacks the second part of the chimney. The sides are so close to each other that it is impossible to bring the knees to the height of the lowest part of the back and it is very difficult to cling to the rock. Yet Tissay succeeds in raising himself higher, inch by inch, between those perpendicular, smooth granite walls and so attains the top of the chimney.

'Young Tissay and then I follow. Half-way I find two small projecting humps, which give some support and a chance to blow a bit. From the foot of the chimney we took 3 hours to conquer a difference of 50 metres. We succeeded by Tissay's extraordinary ability and pertinacity.'

Strange to say, no details of the *first ascent* of this chimney have been recorded, and I made it my business to investigate it. The President and Mr. Sydney Spencer suggested my making enquiries of Hans Almer, who had accompanied each of them for several campaigns. My application to my friend Henry de Ségogne resulted in the rumour that the leader had been 'le petit Pollinger.' On writing to Josef I found that he knew all about the matter—what does he not know?—and that Hans Almer had told him all about his ascent. Hans is known to many of us as one of the most determined and skilled climbers of his day and as a sound and careful mountaineer. He was probably the strongest of all the five Almer brothers, if indeed any distinction can be made in such a redoubtable family. He led the first ascent of the Grépon by the now properly named 'Plaques Morse' with the President and Ulrich, Hans's elder brother, who, that day, was hampered by a damaged hand.

I wrote to young Peter Almer, to see his uncle Hans, likewise an old friend of mine. This is what young Peter writes:

'Hans says he did make the first ascent of the Requin by the chimney. He says he cannot recognize on the photograph,³ where he went. He followed the regular route as far as the point where one turns to the right and descends a bit [this is the foot of the chimney]. From this point, he states, a little chimney leads up slightly to the left. This he climbed and did not find it easy. Then follows a little gully [? ledge—G. H. M.] (Rinne) to the right towards the great chimney. In this gully there is handhold and one must climb across like a cat on a wall. The first bit in the great chimney is, he states, not the most difficult, but higher up it is very steep and difficult. The bit from the top of the chimney to the summit is not difficult. The Herr was Mr. Joseph Gibson and the date July 1899. The second guide was Christian Bohren, likewise of Grindelwald.'

Mr. Gibson is good enough to supply further information which I print in full:

'I remember going up the Requin perfectly and our surprise when we found out that we had gone up the way that hitherto had only been descended. It had not been much climbed up to then and there was some difficulty in getting directions of the usual route, but Hans Almer came across someone who told him the way—at any rate so he told me—and so we set off. The finding of a practicable route over the lower part of the chimney was rather lengthy as there was nothing very satisfactory in the way of handholds and the distance between them was large. The chimney, in the route we took over the lower part, offered no opportunities of jamming. The upper part offered no difficulties.

'Hans Almer had never been up before nor had, of course, the other guide. In fact, I think it was Hans Almer's second visit to Chamonix, so nearly everything we did was new to him.'

It is a great satisfaction to put on record an account of a climb that reflects distinction on the whole party.

While engaged in these investigations I applied very naturally to that inexhaustible source of information, my very good friend Claude Wilson. I am fortunate enough to assure the permanent record of these early experiences on the Requin. He writes (collated extracts from several letters):

'You tell me you are interested to hear what I know about the early attempts on the Requin.

³ Plate 3, *A.J.* 38, opp. 268.

‘ I believe I was the first to spot it as an unclimbed peak, and worth climbing. Before that it was merely the end of the Plan ridge. This was about 1889, and in that year and the next it was a bit of a secret and Wicks and Morse used to call it “ Pic Wilson ” and it was regarded as my preserve.

‘ Then I—not caring to use the name—called it “ The peak round the corner ”—which took on among the initiated gang—partly because it helped to keep secret the whereabouts of those mysterious expeditions. This name or appellation probably held the field till 1893 ⁴—when “ Dent du Requin ” was suggested, I think by Conway, and at once universally adopted. The name could not be bettered, as from near the present hut it much resembles the outline of a shark’s tooth.

‘ On July 31, 1890, I started with C. H. Pasteur and Auguste Cupelin, a splendid rock climber, but an indifferent guide on snow. Had he rounded the base of the Requin, as I wished, and as everybody does, we *might* have got up, for the weather was fine, and starting at 2.15 A.M. from Montanvers we could have reached the position of the present hut about 5. Cupelin refused this way, and said the right way up the Plan was up the ice-fall between the Requin and the Rognon. We floundered about those crevasses and séracs for 3 or 4 hours, but could find no way up, and turned back, having never set foot on the Requin.

‘ I had to go home then, and “ presented ” the peak to Wicks and Morse, who (a few days later I think) made the first attempt. They tried the buttress on the left side (ascending) of the Fontaine chimney, climbing by a crack to some height, but did not succeed in traversing thence into the angle of the chimney, though they got part way towards it.

‘ To continue my narrative : Wicks and Morse made several further attempts—(seven I think in all) and I was with them on two or three. The weather was often so bad that nothing was attempted on the top rocks ; and on no occasion was the Fontaine chimney found free from ice. The last time that we tried the Fontaine chimney was on July 26, 1893, when we started from the Col du Géant, and rounded above the Rognon. Morse got up a crack on its left, and I followed with much pulling. From the little platform reached, we each had a try to get into the bed of the chimney, but no progress was made in gaining height. There was a lot of ice in the angle of the

⁴ See *A.J.* 17, 9.

chimney and on the traverse and crack leading to it. Finely balanced and awkwardly placed, one could not chip the ice away with a piolet. We always felt that the route was probably possible, if we could get it free from ice, which accounts for our hammering away at this route instead of trying to round the top, which seemed also an equally difficult proposition. I meant, if I went again, to take a sharp-pointed hammer which could be used one-handed to chip away the ice. If we could reach the bed of the chimney we thought we could probably get up.⁵

'We had found traces of another party on our way up the lower rocks and on the shoulder, and there was apparently a cairn on the top. Obviously if this was really so, the ascent had not been made by the chimney, where there were no traces. Of course we all know now that it had been climbed on the preceding day (July 25) by Mummery, Slingsby, Hastings and Collie, and we all know the circuitous route they took.

'On August 6 (1893) we (the same party) starting from Montenvers, tried to reach the final part of the Mummery-Collie route from the foot of the S.E. face. We spent a long day on the rocks trying first up the middle, then right, and eventually left, where we thought we had found a possible line of ascent, from the foot of the S.E. face keeping well to the left, till nearly level with the place where they crossed below the summit, and then traversing to the right to join their route. We started from Montenvers 2.30 A.M. and got back at 7.45 P.M.'

'In 1896 (July 9) Wicks and I, with Alfred Simond, made the ascent by the route just alluded to. We were always coaching Simond (who led), and making him go further to the left in the earlier part of the climb. (This seems to have been the second ascent of the Requin.) On the top I tried to get down by the Fontaine Chimney. My note runs: "Had not enough spare rope—would probably require 150 ft. extra rope to leave behind, or 300 ft. to double." Our 100 ft. thin spare was not nearly long enough, and I was not sure of finding a landing place half-way down. Consequently (Alfred Simond above) I tried down the S. face of the great rock which forms the (true) right wall of the

⁵ This route was doubtless followed by Hans Almer in his first ascent of the Fontaine Chimney, and by Tissay on the second. It is understood that both M. Jacques de Lépiney and Mr. Bower—independently, and neither knowing anything of these attempts and ascents—have indicated this line of ascent as offering the best chance.

chimney,⁶ hoping to reach the place where I had been before with Morse (ascending). Half-way down I found *climbing* impossible; and, though I could have been lowered, it was questionable if the last man could get down with the rope at our disposal. Consequently we descended by the way we had gone up. We spent $1\frac{1}{2}$ hrs. trying this route and in the top of the chimney, and lost another hour lower down by taking the rocks too far E. (Simond's constant temptation both up and down). We left Montenvers 12.5 A.M. and got back 11 P.M.—were on the rocks from 5 A.M. till 7.40 P.M.—and on the top (including time spent trying to get down chimney) 11.55 A.M. to 2 P.M.

'I don't think there is a decent picture of the Requin in the "A.J." The best I know is that in Mummery's book, but that now given (source unknown) is better. The dotted route is our route up and down, and this route crosses our exploration route (August 6, 1898). We went up the central chimney till we got stuck; then came down and tried to the right, and eventually to the left, going far enough to feel sure we had struck oil.

'The summit of the Requin consists of "three enormous sabs planted endways" (Wicks, "A.J." 17, 87). Three giant blocks or towers or monoliths others might call them.

A. North—highest—top of Requin.

B. South—perhaps 90 feet lower.

C. East of B. and about half its height.

The Fontaine chimney lies between A and B and faces S.E. All of these are readily identified on the photo "A.J." 38, 268. In this photo, block C looks as if it might be part and parcel of B. In reality it stands well in front, and is separated from B by a well-marked crack or "fissure" (Morse) and a small "col," where there is an ample platform for two persons (or the small "platform" may be below the "col"); anyway the

⁶ In early June, 1904, when I made the ascent with Josef Pollinger, there was apparently lashed round a great boss in this true right wall, some 30 ft. below the top and perhaps 40–50 ft. distant from the bed of the chimney, an enormous and ancient rope noose, from which 8–10 ft. of frayed end was swinging loose. On the descent of the Géant Glacier, we met M. Emile Fontaine and the Ravanel; they explained that this rope—enormous only in the extent of perpendicular terrain that it embraced—was a relic of attempts on the Requin before it was climbed; cf. *Mummery*, p. 169; *A.J.* 17, 16. E. L. S.



DENT DU REQUIN.

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traverse thence would land one into the chimney—"above the overhang" (Morse) or "some fifty feet up" (Wicks).'

'It is odd that so difficult a mountain should have been climbed by so many routes (see *Guide Vallot*)—and still odder that in the first four ascents the summit should have been approached by four different routes:—

1893: Mummery's by S.W. and S.E. face to reach E.N.E. arête.

1896: Wicks, Wilson, Simond—S.E. face to reach E.N.E. arête.

1898: Fontaine's route up by "Colonnes" and down by his chimney (both facing S.E. and both new).

1899: Joseph Gibson and Hans Almer's route *up* by 'Fontaine' Chimney.

These notes were submitted to my old friend, Sir George Morse, President A.C., one of the great mountaineers of the period and a foremost member of what was in those days, pre-eminently, a great 'guideless' party. I found that he possesses detailed accounts of his Alpine expeditions, and he is good enough to permit me to print the following extracts:

'Aug. 7, 1890: Morse, Wicks and a porter, François Simond, age 22, going over the Col du Géant, had a shot at the Requin *en route*, got to foot of great chimney, subsequently named Fontaine Chimney, and found it plastered with ice, so returned to our route.

'Aug. 9, 1890: Coming back from Courmayeur tried again. Both ascended the crack on the left, but could not do the traverse into the chimney.

'July 29, 1891: Gibson,⁷ Morse, Wicks and Wilson arrived at foot of chimney, and as snow began to fall had to return.

'Aug. 10, 1891: Gibson,⁷ Morse and Wicks, returning over Col du Géant, after a climb on the Grandes Jorasses, tried Requin again, and got no higher; the weather being very cold was against us.

⁷ J. H. Gibson, not to be confused with Joseph Gibson of the Cheminée Fontaine mentioned above.

- ' July 26, 1892 : Gibson,⁸ Morse and Wicks tried two couloirs on the S.E. face, but made little height on either.
- ' July 27, 1892 : Same party tried again by the old route and found much snow on rocks and ice in the chimney, so returned.
- ' Aug. 6, 1892 : Same party tried again, but made no advance.
- ' July 26, 1893 : ⁹ Morse, Wicks and Wilson, coming from Col du Géant, ascended to foot of chimney, and I passed the small traverse for the *first* time into the chimney, and found it quite smooth with no handholds, so got no further.
- ' Aug. 6, 1893 : Morse, Wicks and Wilson tried S.E. face by 3 routes and found the rocks high up very slabby and difficult.
- ' July 10, 1898 : Morse, C. H. Pasteur and Alfred Simond tried Simond's route of July 1896 (see Wilson's account) and went up ridge to just below the " Hat," and could not get across from there, Simond saying the mountain must have changed.
- ' Aug. 16, 1906 : Ascended the Requin by ordinary route from foot of Fontaine Chimney with Ed. Payot and a young Ravanel, descending by the Fontaine Chimney. My notes say " went down the chimney using a 35 metre rope doubled, twice, found the climb very interesting, especially seeing all the big chimney, which we never could have got up."

' My *last* climb in the Alps was the Requin on August 7, 1923.

' P.S. I still *think* my traverse into the couloir was well above the overhanging step at the bottom, but I believe I was 20 ft. *at least* below the jammed stone. The whole chimney where I was, was quite smooth and no handhold appeared anywhere to help.

' The little traverse or ledge is very cramped and, if I re-

⁸ J. H. Gibson, not to be confused with Joseph Gibson of the Cheminée Fontaine mentioned above.

⁹ Mummery's party made their ascent the day before.

member rightly only about 9 ins. wide and overhanging above, and you only get along on your knees and stomach and elbows, and it was all one could do not to fall off. From memory I should say it was 12 or 15 ft., and the man on the point at the top of the crack holding your rope was only a little above you, and couldn't have prevented a nasty fall. Whether this was Hans Almer's route I don't know; he *may* have traversed higher up. I know of no photograph showing the inside of the bottom of the chimney.'

Thus ends an interesting chapter.

AN EXTRAORDINARY ESCAPE.

By E. L. STRUTT.

THE scene is high up on the S.W. slopes of what is called (Piz) 'Grialetsch,' 2698 m., in the Fexthal. The date is December 29, 1926. The tale, describing a miraculous escape from death, is intended to point a moral. It should be read in conjunction with 'A.J.' 37, 160-7. An absurdly garbled version has appeared in the 'cheap' Press. The writer apologizes for the constant use of the personal pronoun; under the circumstances this is inevitable.

Despite a high temperature (30° F.), signs of Foehn and a lowering sky, a party consisting of four persons—Miss Lindisfarne Hamilton, an English girl of nineteen; Mr. Patrick Hamilton, her younger brother; Mr. Christopher Hussey, a young Englishman, and myself—determined to start on an attempt to ascend the above summit. There was really nothing imprudent in this proceeding. The ascent does not present the slightest difficulty, and a quick return, should bad weather occur, could (or should) be easily accomplished. I had made the winter ascent on several previous occasions, and Miss Hamilton and her brother, both admirable walkers, had accompanied me. Hussey was an unknown quantity, but proved quite efficient. Miss Hamilton was provided with an ice-axe, Hamilton and Hussey had only ski-sticks, but all three were properly equipped in other respects. I was carrying all the *impedimenta* of the party, and decided at the last moment that a rope was not necessary and it was accordingly left behind.

Leaving the Hôtel Waldhaus, Sils-Maria, at 09.45, the party began the ascent proper at 10.30. We were all wearing ordinary climbing boots, ski or raquettes being of no use under the conditions then obtaining—an inch or two of fresh powdery snow resting on older, mostly wind-blown, beds. Bearing straight up N.E., the snow becoming ever harder, we reached the foot of a precipitous rocky cliff, almost completely covered with a frozen waterfall. To the right (S.) was a broad snow-gully, and farther to the right again a continuation of the same line of cliffs, which extend for some 500 yards towards the S. These cliffs are in general quite vertical, or even overhanging, and are about 800 ft. high. The snow-gully separates the cliffs into two distinct portions.

The party crossed the snow-gully and then worked up its true left bank, I being occasionally obliged to cut steps in hard snow which alternated with soft drifts. As soon as a sufficient height above the line of cliffs had been gained,¹ we traversed still more to the S. over gentle convex slopes of some 25°–30°, and then turned straight up (N.E.) towards a kind of broad ridge forming the S. buttress of a lower peak of the desired summit. Along this buttress (N.), swept almost dry by the wind, the lower peak, perhaps 8000 ft., was very easily attained.

It was 12.00, and snow was beginning to fall gently. The temperature was about, or above, freezing, the valley being still perfectly visible. It was decided to take lunch and then return. At 12.30, just as the party was packing up, the weather, without any warning, changed completely. A regular blizzard set in from the N.E., the visibility was reduced to a few yards, and the party was almost blinded by whirling masses of snow. We started down in the following order: myself, Miss Hamilton, Hamilton, Hussey. The leader was able to steer a pretty good line down our route of ascent, but all tracks had, of course, completely vanished. I experienced some difficulty in keeping our party together, and Hussey was completely invisible in the storm, although only a few yards distant. The traverse above the line of cliffs, some 500 ft. below, was safely reached, and here the full fury of the gale met us, straight in our teeth. My dominant idea was to bring the party to a more sheltered spot. I hurried, accordingly, at express speed, without cutting steps, over the above-described slopes (of some 25°–30°), in a descending

¹ The party could have continued straight up the gully but I, no doubt rightly, considered the possibility of a slab avalanche occurring.

traverse. I again closed the party up. Miss Hamilton, closely following me, was going perfectly, using her axe like an accomplished mountaineer: the remainder of the party were barely visible. Suddenly, a shout from Hamilton informed us that Hussey had slipped on the traverse and disappeared. There was nothing to do except to continue, and, as I turned to do so, a short exclamation from Hamilton was followed by a prolonged slip on his part. For a few yards he struggled gamely, driving the point of his stick into the hard snow. Twice did he almost succeed in stopping, and then, losing all control, vanished, on his side, into the swirling abyss of storm clouds. . . . Again, there was nothing to do, and I had to continue down with Miss Hamilton alone. That lady, who had just seen her brother disappear before her eyes, kept her head and followed calmly and carefully in the steps that I had at last found it necessary to cut. We crossed into the gully separating the two lines of cliffs and descended it rapidly, half-buried in masses of soft snow. Below the cliffs I led Miss Hamilton to the lower gentle slopes, where I bade her descend to the valley alone, to send up help. She obeyed without remonstrance. The air was clearing, and I turned to the S., traversing far below the long lines of cliffs, until I reached a spot, in my judgment, immediately below their centre. I then turned straight up and fought my way through deep snow, towards the base of the cliffs. . . . It was the worst moment of my Alpine career. Well I knew that there could be no hope, short of a miracle, of finding my companions alive. They must have slid over some 300 ft. of very hard snow, followed by a sheer drop of 300 ft. over the pitiless rampart. Yet, the miracle had happened; I heard a shout quite close to me, and suddenly perceived the figure of Hamilton standing up in front. That boy, barely recovered from the fall, had already made his way to where his stick had lodged above, and then, alone, semi-conscious, with his left arm broken in two places, had reached the spot where Hussey was lying, apparently dead, some 80 yards farther to the S. Hamilton directed me to the place, saying, 'I am all right, but Hussey is dead, or dying.' Telling him to wait (Hamilton, after finding Hussey and shouting for help, was working his way downwards with that purpose in view), I soon reached Hussey; he was lying in a deep drift, between jagged rocks, feet foremost, pointing valleywards. As I reached him, Hussey sat up and began babbling semi-incoherently. The storm was clearing, and the floor of the Fexthal became visible (14.30). I had taken about an hour from the time of the

accident to reach the final scene of the fall. Several figures could be seen below just starting upwards. They were a party sent up by Miss Hamilton.

Little remains to be told. I contrived to get Hussey a considerable distance down, Hamilton having, on instructions, preceded us. The Swiss party,² assisted by some British skiers, then skilfully and quickly transported the now almost unconscious Hussey to a sleigh. By 16.00, Hussey and Hamilton had been conveyed by Miss Hamilton to the hotel. I followed on foot and alone.

It was not, unhappily, the first accident that I had been involved in. I realized, and had done so from the first, that I,

* is place of slip.

• • places where falls ended.



S.W. FACE OF GRIALETSCHE AND FEXTHAL.

and I alone, was really responsible for the fall. I had committed a series of unpardonable mistakes. First, I had started for a winter climb in doubtful weather; secondly, I was—when accompanying an inexperienced party—without a rope, and, worst of all, I had hurried them, stepless, across a slope, where a slip was, humanly, bound to prove fatal. It was no excuse that under average winter conditions the slope, where the slip occurred, is a mere walk, and that even under the actual conditions, steps were not necessary for myself. The storm was undoubtedly an important factor; yet I cannot exonerate myself from most of the blame. Providence had averted disaster in a place where the odds were a thousand to one in favour of death. If any doubt could remain, one look at the cliff would convince the most utter sceptic. Hamilton and Hussey had

² My warmest thanks are due to Herr Fümme and the Messrs. Max Muller and Donner—the second an Eton boy.

fallen about 600 ft., of which the last 300 ft. were absolutely perpendicular, nay, overhanging. Each had landed on small deep drifts between projecting boulders, and, most miraculous of all, neither had fallen on his head. The impetus of the slip had caused them to clear the base of the cliff by many yards.

Hamilton had no injuries except for his badly broken arm. Hussey was suffering from concussion and severe bruises. In neither case were their clothes even torn.

Both have now quite recovered.

The humiliation to myself is everlasting ; my admiration of my companions eternal.

THE THIRD MOUNT EVEREST EXPEDITION.

An Austrian Criticism.

COLONEL NORTON'S volume entitled 'The Fight for Everest, 1924,' has been translated into German by Herr Rickmers and published at Basel under a distorted and inaccurate title, *Bis zur Spitze des Mount Everest. Die Besteigung.*

We have before us an able and, on the whole, sympathetic review of this volume, printed in the *Æ.A.Z.* xlix. 1-4, from the pen of Dr. G. Lammer, formerly famous for his mountaineering exploits and lately well known as 'the most terrible of all Alpine critics.' The opinions of such an expert are worthy of careful consideration, and we think it may be well, therefore, to cite from his review a crucial passage for more particular study. In dealing with the last fatal and immortal attempt, Dr. Lammer expresses himself as follows :

' . . . But Mallory had recovered from his bad throat and was blazing with energy for the summit. For this last attempt he chose Irvine as his companion, which caused grave misgivings to Norton. I consider that this choice of Mallory's proved to be his undoing. Why did he select this 22-year-old athlete and oarsman, who had so far accomplished no mountaineering expeditions worthy of mention and who was suffering from throat trouble? Chomo Lungma as a first expedition, what an outrage ! And yet there was available the very experienced Odell, who had brilliantly passed the altitude test. Mallory was anxious, so as to make certain of a result

this time, to use oxygen and was in need of Irvine's mechanical knowledge; also Irvine believed in the magic of oxygen, yet Odell had obtained no relief from its use. Perhaps there are unknown reasons for Mallory's fateful choice. . . .

In justice to Mallory and Norton we feel bound to state that the opinion expressed above seems to be based on a not altogether correct appreciation of the physical condition of the climbers, and, in any case, to be too positively asserted.

Odell had *not*, at this stage, 'brilliantly passed the altitude test.' Up to two or three days before, this said altitude had found him wanting: he had then climbed up to 25,000 ft., and Norton was only just beginning to realize that his earlier form had belied his great capabilities. In fact at this period Odell was about equal to Irvine as regards his resistance to high levels. Odell had then only had *one* very inconclusive trial with oxygen. Again, as regards Irvine's bad throat: this was nothing like as bad as Somervell's had been when the latter had started on the attempt of a few days before and was about the same as that which Mallory had endured and from which he was now practically recovered.

Nevertheless, there are few mountaineers who will not agree, in theory at any rate, with Dr. Lammer's stern reasoning. Many of us, including those who know the mountain, are inclined to believe that Mallory and Odell would have achieved the summit and *returned*. But, on Everest, the last word must and always will be with the Leader on the spot. It is rash, however tempting, for those who are at a distance to challenge that Leader's decisions. It is extremely easy to be wise after the event!

Dr. Lammer realizes that the great mountain will be conquered, and by Britons. He also realizes the uselessness and encumbrance of the oxygen in its present apparatus. We thank him for his understanding of the spirit of the expedition and his sympathy in its tragic conclusion; we can substantially agree with much of his criticism. But, while the standard of taste in the expression of sentiment varies so widely in different nations—*de gustibus non est disputandum* (!), Dr. Lammer would, we think, have done well to refrain from his comment on the absence of any such expressions in Mallory's letters to his family in their published form.

E. L. STRUTT.

D. W. FRESHFIELD.

Univ. of
California



Phot. J. C. Gait.

PIZ CENGALO
from Piz Badile.

THE ALPINE CLUB PHOTOGRAPHIC EXHIBITION, 1926.

THE Photographic Exhibition held at the Club Rooms in December last showed a regrettable falling-off in the number of exhibits. This was difficult to account for, as, although the earlier part of the season was distinctly bad, yet the almost continuous fine weather which prevailed from the middle of August until the end of the summer should have tended to produce an increase in the number of photographs rather than a diminution. We also missed the names of several of our usual exhibitors. Possibly our photographers who took their holidays late in the season were too much occupied in availing themselves of the excellent climbing conditions to pay attention to the calls of the camera; but we trust that next December will see a substantial increase in the number of exhibits. After all, a small hand camera adds little to the weight of the rucksack. It is easily manipulated, and under favourable conditions yields thoroughly satisfactory results.

Compared with many of the previous Exhibitions there was an absence of photographs from outside the Alps. Apart from a few interesting views taken in Japan, Peru and one or two other regions, all the exhibits were of places within the Alps or the British Isles. The Valais, the Bernese Oberland and the Mont Blanc districts, in particular, are evidently still the happy hunting-grounds of our photographers; but while it is always delightful to see views of old favourites—and no doubt from the point of grandeur they are difficult to beat—still there are many other districts in the Alps easily accessible, where not only desirable pictures are to be found but also mountain forms well worthy of reproduction.

Though the Exhibition did not provide as many outstanding photographs as in some former years, yet the average of the exhibits was distinctly high, and a great variety of views was shown. For those interested in topography there were some good panoramic views, and there were also some fine mountain faces; while from an artistic point of view a high standard of excellence was attained by many exhibitors. The photographs were on the whole suitably mounted and tastefully framed.

We thought that one of the best pictures in the Exhibition was Mr. Frank Smythe's 'A Crevasse below the Bergli.' The photograph itself gave a great idea of depth and the walls of

the crevasse were well shown, while the background of rock and cloud made it particularly impressive. Mr. Smythe's 'Sunset before Storm from the Strahlegg Hut' and his 'Gathering Storm, Bernese Alps' were also arresting studies, and his 'Agassizhorn,' though a small photograph, was a beautiful one.

Mr. Arthur Gardner contributed several interesting views. His 'Dent d'Hérens from Valtournanche' was an admirable picture, being evidently taken after fresh snow, while the mist gave an impression of height to the mountain, which, on this side, might otherwise be lacking. His 'Gabelhorn from Durand Glacier' was a fine photograph. The ridges stood out exceptionally clearly, and the contrast between the side of the peak in shadow and the sunlit slopes of snow was especially effective. His 'Mont Blanc from Brévent' was a striking view.

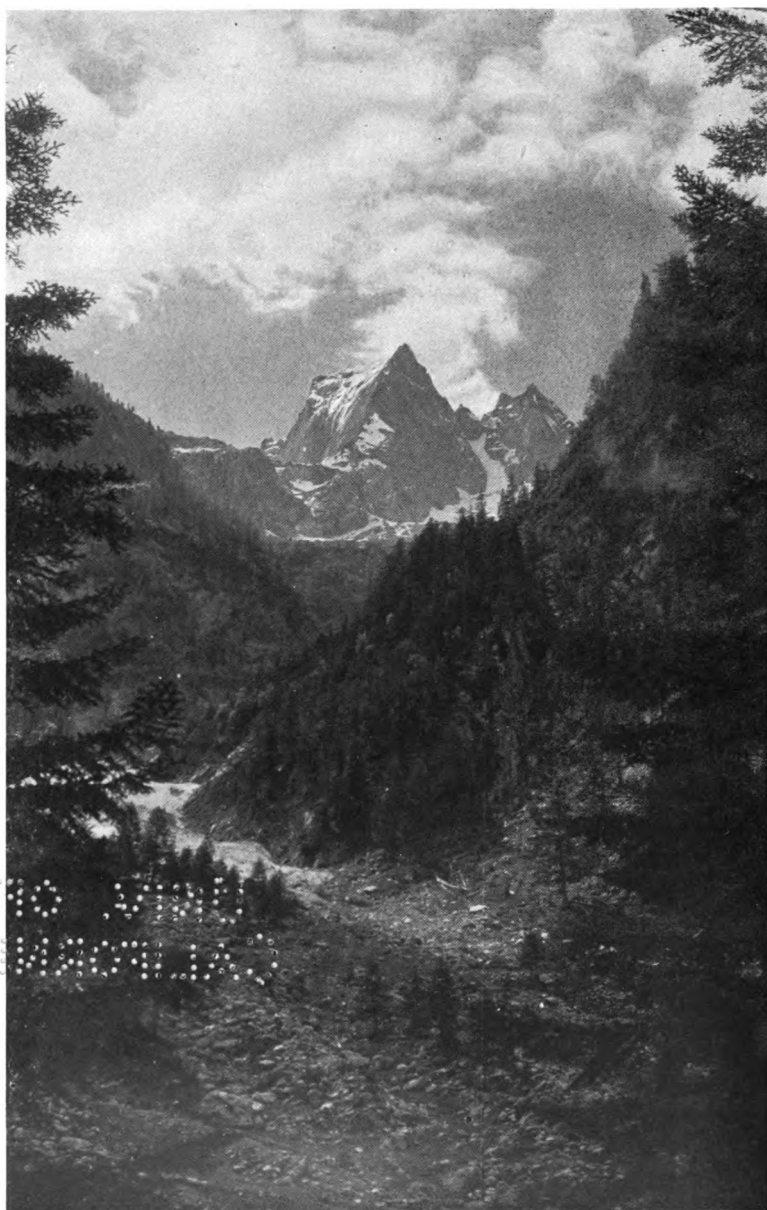
Mr. R. S. Morrish, as usual, sent us several exhibits. We preferred on the whole 'In the Bregaglia' with its attractive foreground and the bold outline of the mountains behind, but his 'Matterhorn from the Stock Gletscher' was an excellent picture, and his 'Alpine Thistles' a pleasing composition.

Mr. Eustace Thomas's 'Kranzberg at Evening' was an artistic production, the general effect of approaching darkness being uncommonly good. His 'Grandes Jorasses from S.' gave an admirable representation of the Southern face, while his 'Grandes Jorasses from N.' showed to great advantage the precipices on that side of the mountain. Mr. Thomas also exhibited an excellent view of the Aiguille Noire de Péteret.

Mr. C. J. Macdonald's 'View from Terminus of Gornergrat Railway' should receive special mention. The Lyskamm, Castor and Pollux stood out in a most marked manner, and the gradations of light on the snow and the glacier were well defined. He also gave us in his 'View from above Mürren' a familiar scene which, however, was none the worse on that account, the foreground of the picture being especially well chosen. His 'Range from back of Schynige Platte' was another effective view with, again, a good foreground.

Sir Alexander Kennedy sent us, in addition to some photographs of his own, which included pictures of 'A Perthshire Snow Arête' (easily mistakable for an Alpine scene) and 'A Highland Loch,' two enlargements from obliques taken by the 14th Squadron R.A.F., Palestine, at about 5500 ft. One of these, 'Unexplored and Unvisited,' well deserved its title, as it conveyed an undefinable impression of desolation and waste. The other was of the historic summit of Mount Hor, one of the earliest mountains mentioned in the story of Israel.

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CALIFORNIA



Phot. W. N. Tribe.

PIZ BADILE
from Val Bondasca.

Mr. W. N. Tribe's 'Piz Badile from Val Bondasca' was a telling picture. He also contributed an artistic photograph of the Piz Palü, with the mountain in the distance delightfully framed between a pine tree and a rock. We suggest, however, that it would have made a better balanced picture if the height had been slightly reduced.

Mr. J. C. Gait's work was, as usual, of a very high order, including an imposing view of the Cima del Largo and a most happily composed picture, 'Piz Cengalo from Piz Badile.' The latter (with Mr. Smythe's 'Bergschrund from below the Bergli' and Mr. Tribe's 'Piz Badile from Val Bondasca') was chosen for reproduction in the *ALPINE JOURNAL*.

An agreeable feature of the Exhibition was provided by some views in the Japanese Alps by Mr. H. Yamada, and several photographs of the Swiss Alps by Mr. Yuko Maki, Mr. S. Matsukata and other Japanese climbers. Amongst these we would particularly mention Mr. Maki's 'On the Krinnegletscher' and Mr. Matsukata's 'Matterhorn' and 'Tiefenmattenjoch.'

Mr. Sidney Young showed some interesting views from Peru, including El Misti, Arequipa, and a distant view of the Chachani Mountains.

Mr. Henry Speyer sent some striking photographs from Wales. His 'Llyn Idwal' was a very successful composition, the light on the water being particularly pleasing, while 'The Llugwy River near Capel Curig' and 'The River Ogwen near Ty'n y Maes' were both delightful river scenes. In all three photographs the cloud effects were well rendered. His 'Crib Goch in Winter' and 'Looking N.E. from the Summit of Crib Goch' might both at a first glance have been views of Alpine peaks, the mountains being covered with snow and giving an impression of great height. His 'Mist on Clogwyn Du (Glyder Fawr)' was also a fine production.

As usual, we are indebted to several ladies for welcome contributions. Miss L. M. Davidson's 'Cimone della Pala, the Rolle Pass,' was an outstanding photograph; although detail was somewhat lacking in the foreground, the peak itself was well rendered and justified the claim of the mountain from this point of view to be considered the Matterhorn of the district. Her 'Cime di Lavaredo, Sexten Dolomites from Lago Misurina,' was also a lovely little view with a well-chosen foreground.

Miss Ulrica R. Dolling had several noteworthy pictures. Her 'Monte Rosa and the Lyskamm from the Breithorn' was

a taking photograph, while the 'Finsteraarhorn from the Schreckhorn' and the 'Breithorn from the Gandegg Hut' presented studies in mountain faces worth attention. Another pleasant view was 'The Matterhorn from the Zinal Rothhorn,' the success of which was much enhanced by the cloud effects.

Miss Sophie L. Tiarks sent us a happy study, 'On the Path to Saas Fee.' This was an excellent composition; there was no suggestion of pose about the figures, and the photograph of the little boy was notably charming. She further showed a pleasing picture of a Crucifix at Saas Fee.

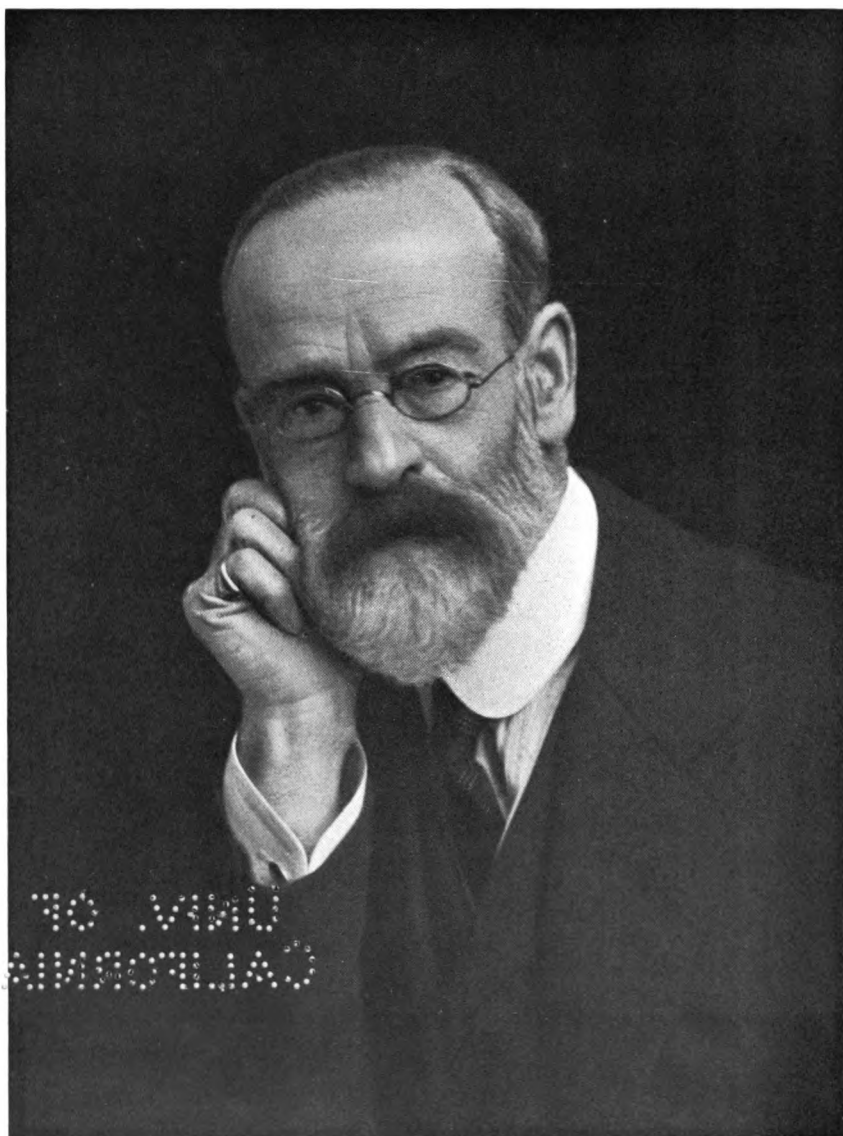
Miss Nea E. Barnard's 'L'Aiguille Verte and Les Droites' and 'Aiguille Mummery' and Miss Joyce Chapman's 'Fletschhorn from Slopes of Monte Leone' and 'Pont Serrand' were also interesting photographs.

The 'Glacier de Talèfre from the Jardin' by Miss H. F. Margaret King was an excellent representation of the glacier and the surrounding peaks. She also, together with Miss V. A. Bode and Mr. F. A. Watney, sent some attractive coloured photographs. Of these Miss Bode's 'The Matterhorn' and Mr. Watney's 'Karersee' were particularly effective.

There were several other exhibits to which we should have liked to refer in detail had space permitted. We must not fail, however, to mention the Rev. A. E. Murray's 'The Wetterhorn in Winter' and his 'Thyrill Mountain, Hvalfjord, Iceland,' in which the rocks were particularly well rendered; Mr. Reginald Graham's 'View from the Weisshorn'; Mr. H. R. Williams' 'Triolet,' with its adjacent Aiguilles; Mr. H. J. Gait's 'Monte della Disgrazia, from Piz Cengalo,' which was not only a pleasing composition but most interesting from the topographical point of view; Mr. Hugh Gardner's 'Portjengrat' and 'Roccia Viva'; Mr. G. T. Western's 'Dent Blanche from Zinal Rothhorn'; Mr. G. A. Lister's 'Mont Blanc at Dawn,' with its fine effect of the early morning light; Mr. Howard Priestman's 'Horungtinder from Vestefjeld'; Mr. William Bellows' 'Early Morning on the Obergabelhorn' and 'The Matterhorn, Evening Light'; and Mr. L. Ashcroft Ellwood's view 'North Ridge of Mitka, Highest Peak of Mount Olympus,' from which it would appear that the former abode of the gods should afford some interesting climbing.

As usual, we are much indebted to Mr. Sydney Spencer for the time and trouble which he has taken in connection with the Exhibition. There is no doubt that the photographs benefited very much in appearance from the excellent way in which they were arranged.

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Phot. Elliott & Fry.

WALTER LEAF.
1852-1927.

IN MEMORIAM.

WALTER LEAF.

(1852-1927.)

WALTER LEAF was a singular instance of a man who came before the public in a double personality. In the City he was eminent as a high financial authority and the Chairman of the Westminster Bank. In the world of letters he was acclaimed as a scholar of unflinching accuracy and a student of the Homeric poems who had taught commentators to recognise that the topography of the *Iliad* was based on local facts. These he made a personal study of in a tour, the results of which were communicated to the Geographical Society (*Geo. J.* xl. 25-45). It included an ascent of Mont Ida, the scenery of which he compared to that of the Jura.

Leaf's two serious occupations were lightened by many accomplishments. His mind was as versatile as it was accurate. He could play with verse and translate Persian and Russian poetry, not in the fashion too often thought good enough for English readers, but with exact scholarship on which this is not the place to enlarge. He surprised his fellow-passengers in the business men's morning train by translating Greek epigrams on the way to the Bank! He startled Chicago by telling its citizens there was no better training for a man who wanted to get on in business than the Classics! He was himself a striking illustration of an argument which to Chicago sounded like a paradox. Most English men of business save themselves from becoming machines by keeping up some sport or interest. But few of us can hope to combine the accuracy and versatility of mind which enabled Leaf to take, as it were, a Double First in life as a financier and as a scholar. Nor did he fail to cultivate other energies. He held numerous posts. He served as President of the Classical Association and of the Hellenic Society; he was also, like his frequent climbing companion, Sir G. Prothero, one of the Vice-Presidents of the Alpine Club (1902-3 and 1905).

Mr. Mumm's invaluable Club Register affords a ready key to Leaf's early climbing activities. He began in 1871 at the age of nineteen with the Breithorn. Next year he climbed about the Bel Alp and the Great St. Bernard.

In 1872 one of the present writers was with Leaf and Pratt ('A.C. Register,' ii. 215). It was a most enjoyable time, though the only reportable result was a new traverse of the Dreieckhorn incidental to an attempt on the N. side of the Aletschhorn which time did not allow us to carry further ('A.J.' 6, 147). This adventure, however, was good enough to console us for a rather annoying disappointment the day before. Our intention then had been to go down to Grindelwald from the Finsteraarhorn by the Agassizjoch (this descent was made by Coolidge, the Fairbanks and Miss Brevoort three weeks later, *ib.* 146). Peter Baumann, our leading guide, whose

discretion was equal to his skill, saw no rashness in it, but the second guide, a dull fellow, jibbed ; he insisted that the party of two guides and three pretty fit travellers was not strong enough, so we had to go back to the Faulberg, having done nothing out of the common. The petty tragedy was relieved by a satyric episode. On the ascent we had passed a stout and pretentious tourist encumbered with a portentously long alpenstock and hauled, perhaps at times lifted, by two guides. They came in an hour or two after we were settled at the Faulberg, and Baumann unfeelingly greeted the leader with the question : ' Ihr Herr ist mehr todt als lebendig, nicht wahr ? ' Those were the days when mountaineering flourished at the Universities. One night there were together at the Eggischhorn no fewer than seven actual or future Fellows of Trinity College, Cambridge. But we must return to our chronicle.

In 1873 Leaf ascended Mt. Blanc by the tedious Aiguille du Midi route ; and in 1875 traversed the Matterhorn. He was active again in 1890 and 1891, making numerous ascents in the Val de Bagnes and Combin district. In 1893 he turned to the Graubünden and spent ten days in ascents in the little known district that lies between the Lower Engadine and the Stelvio and includes the pastoral basin of Livigno and the lately formed Sanctuary for wild animals created by the Federal Government. He gave the Club an account of his wanderings in a paper entitled *In the Land of Bears*.¹ He had previously contributed to the Journal an address on *Climbing with a Hand Camera*.²

The Alpine Club Register gives no climbs later than 1893, and it may be assumed that after that date there was nothing calling for special note in Leaf's Alpine excursions, but they continued, as appears by his diaries, till 1904.

The following are among the principal events in Leaf's life. Born November 26, 1852 ; educated Harrow and Trinity College, Cambridge. In 1873 Craven University Scholar ; in 1874 bracketed Senior Classic and elected Fellow of Trinity. Deaths in his family at this period led him to give up the Bar and join his father's business. In 1892 he abandoned a mercantile career to devote himself to banking. In 1909 he was appointed Deputy Chairman of the London County and Westminster Bank and in 1918 succeeded Lord Goschen in the Chairmanship. He was one of the founders and subsequently Chairman of the London Chamber of Commerce.

He married in 1894 a daughter of J. Addington Symonds and had a son and daughter, both living.

Our younger members can hardly know what an excellent companion and friend Leaf was in addition to all his other merits. His alert perception and various activities were ordered and made fruitful by a constantly sound and well-balanced judgment, and his friends never sought counsel of him without profit.

D. W. F.

F. P.

¹ *A.J.* 17, 221-33.

² *A.J.* 15, 472-9.

PRINCE SCIPIO BORGHESE.

(1871-1927.)

PRINCE SCIPIO BORGHESE (A.C., 1898-1927) was the senior representative of the illustrious Roman family which includes among its ancestors one Pope (Paul V., 1605-1621), and has left such an extraordinary mark on the Eternal City. The Villa Borghese, with its gardens and famous art collections; the Palazzo Borghese, the name and the family: all these for centuries have been pre-eminent in Rome. Scipio Borghese was above all a man of action who could always show great driving power; when financial reverses afflicted his father, far from being discouraged, he succeeded by will power and work in re-establishing his fortunes. He was twice elected Deputy for the Albano Laziale College. In the European war he joined up as a volunteer and was several times decorated for valour. In 1917, Borghese was sent, as member of a military mission, to the notorious Kerensky. He never forgot the artistic traditions of his family, and, before his death, bequeathed to the Basilica of Santa Maria Maggiore the superb Borghese Chapel with its priceless art treasures, which was his own private property.

Tall and well-built, he was a keen sportsman in the best Italian sense which does not include the hunting of beasts or men. He was above all an expert in mountaineering and motoring. This latter qualification especially, endeared him to the Italian nation and to other races besides. When the famous Pekin-Paris 'raid' was started by *Le Matin* in 1907, it was Borghese who proved the victor with his Itala car, overcoming, for that epoch, the most formidable obstacles and literally annihilating all his competitors. His arrival in Paris was a positive triumph.

As a mountaineer, by his skill and speed he rapidly attained the very first flight. He was one of the few who can go anywhere. He was a charming companion and his delightful manners made him immensely popular with all guides. He was especially keen on winter mountaineering; the second winter ascent of Piz Bernina,¹ January 1894, with Martin Schocher and Christian Schnitzler, was due to his initiative. He was unable to devote as much time as he wished to mountaineering, nevertheless he made the ascent of most of the principal summits from Mt. Blanc to the Gross Glockner. Most of his expeditions in the Oberland, Pennines, Bernina and Ortler will be found in the numbers of the *Rivista Mensile* between 1890 and 1900. His greatest feat was unquestionably the first ascent of the formidable N. face of Piz Cengalo,² one of the 'Grey Twins' of Val Bregaglia, the sight of which overcomes even the profanest of tourists.

On December 22, 1898, when trying the first winter ascent of the Adamello, his guides suffered terribly from the cold, one of them dying a month later from gangrene and the other losing nearly all

¹ *A.J.* 19, 482.² *A.J.* 25, 9; 37, 149, 152-3.

his toes. Irresponsible journalists accused Borghese of being almost the cause of this disaster, as if a mountaineer could be held responsible for the bad boots of his guides! Borghese was overcome by grief and his Alpine career seriously affected. He was one of the first Italians to commence camping in the Alps, and with his young daughters (now Princess Herculani and Countess Cavazza) he was often making Alpine expeditions. In 1911, a mischance prevented his joining P. Torti and myself in the first complete traverse of the S.E. arête of Monte della Disgrazia³; he was then camping at the Palu lake. Probably Borghese's last expeditions were in the Valpellina, at Prarayé, in 1912. He was there for a long time, and made the first ascent of the E. face of Mont Brulé with A. Brocherel and A. Chenoz of Courmayeur.

ALDO BONACOSSA.

The Alpine Club expresses its deep sympathy with the family of our late distinguished member.

HAROLD RAEURN.

(1865-1926.)

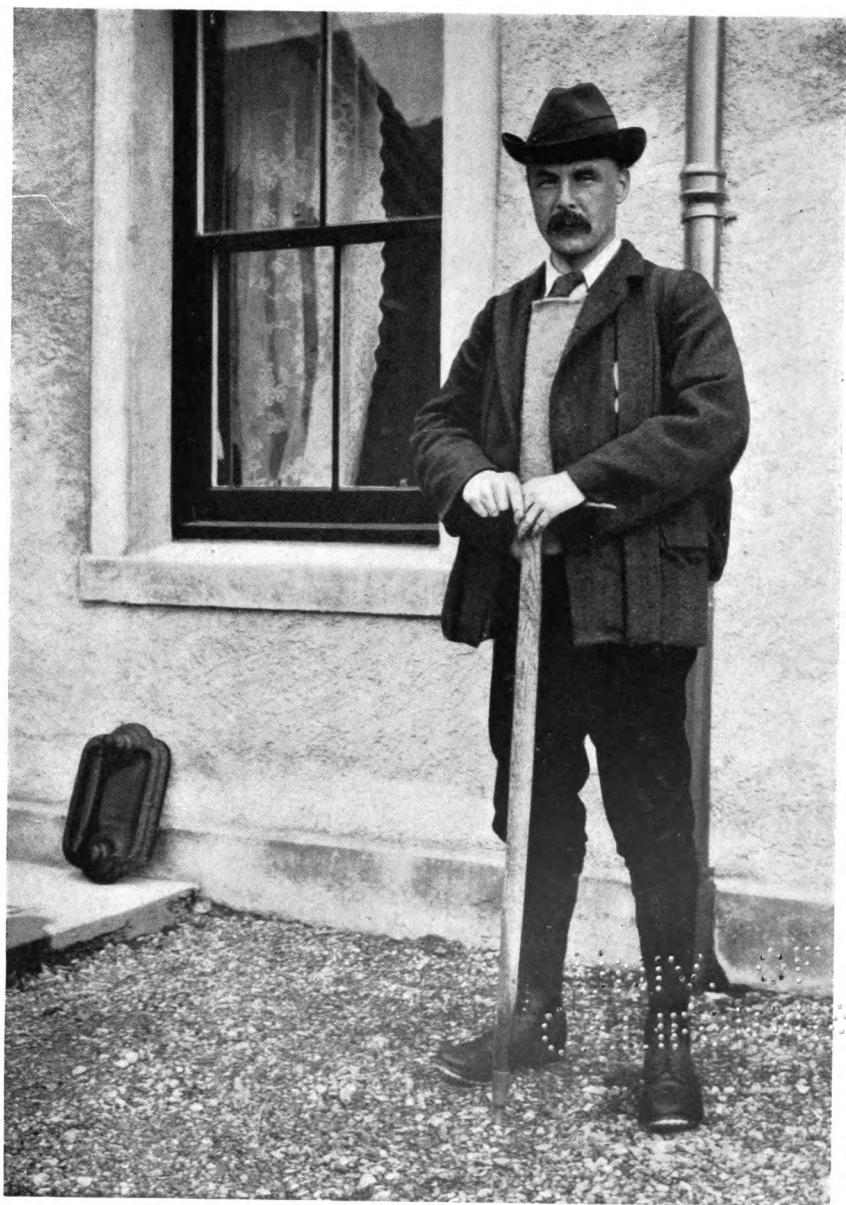
THE death of Harold Raeburn on December 21, 1926, has deprived the Club of an outstanding mountaineer. A born lover of Nature in all its aspects, he was interested in birds and beasts, flowers and rocks, and the mountains made to him a special appeal.

His own native hills of Scotland were the first to attract his attention, and he quickly showed that he possessed in a marked degree the qualifications of a mountaineer. Light, wiry, and active, with supple limbs and a perfect balance, he added to his physical gifts an indomitable will and a sound judgment as to routes and possibilities, coupled with a fearless self-reliance.

He was always ready to help and advise younger climbers, and to go on an expedition with him was a liberal education, which was extended to many. He joined the Scottish Mountaineering Club in 1896, and at once began to show great activity in exploring new climbs and routes, and many of the best climbs in Scotland, both mainland and islands, are due to his initiative. Winter and summer alike found him on the hills, and he rapidly increased his knowledge and technical skill both in rock and icework. He also climbed in the Lake District, where the standard of rock-climbing is very high.

With the knowledge gained at home, he went out in 1900 to the Dolomites, and made some good ascents there. The following year he was at Zermatt and Chamonix, and climbed, amongst others, the Weisshorn, Matterhorn, Monte Rosa, and Dent du Géant. The next two seasons were spent in Norway, and from 1902 all his ascents

³ *A.J.* 25, 745-6.



HAROLD RAEburn.
1865-1926

THE
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were made without guides. The chief ascents of these two years were the complete traverse of the five Skagastolstinder, a new ascent of the Soleitind, first ascent and traverse of the three Saetretinder, first ascent of the Grötsdaltinder, complete traverse of the ridge from the Brekktind to the Gjeithorn, and the ascent of Slogen by the face overlooking the Norangsfjord, which has not yet been repeated.

In 1904 he was in Dauphiné, and climbed the S. Aiguille d'Arves and the Meije, and then in Tarentaise the Pointe de la Glière, and the traverse of the Grande Casse, first British ascent by the N. face, and from Courmayeur the Aig. Noire de Pétérét, involving two nights out in the open.

The following year he was again in Dauphiné, where he made a fine ascent of the Ecrins, and from Chamonix the ascents of the Petit Dru and Grands Charmoz.

1906 was a fruitful year and gave a rich harvest. New summit, La Mouche, in the Aiguilles Rouges du Dolent,—the first traverse of the Aig. d'Argentièrè over the S. peak, La Flèche Rousse; the Finsteraarhorn traverse over the S.E. ridge and down to the Schwarzegg hut by the Agassizjoch, a long day; Schreckhorn, first traverse by the N.W. ridge (*Andersongrat*) and the S.W. ridge, first descent of latter; first British guideless ascent of the Matterhorn by the Z'mutt ridge in difficult conditions, with descent by the Italian ridge in a thunderstorm.

In 1907 an attempt to traverse the Meije by the western ridge from the Brèche was frustrated by bad weather, but the traverse of the whole ridge of the Dôme de la Sache and the Mont Pourri, several mountains at the head of the Val de Rhêmes in one day, the Grand Paradis by the S. face with a thunderstorm on the summit, when both climbers were slightly struck by lightning, the first guideless traverse of the Bec de l'Invergnan, and later Mont Blanc by the Rochers, with descent to Chamonix, in a heavy storm, were successfully carried through.

In 1908 the chief expeditions were: the traverse of the Rothorn, of the Dent Blanche by the 'Viereselgrat,' first time by a British guideless party under very difficult conditions, entailing a night out on the mountain; the complete traverse of the Aig. du Chardonnet, and the traverse of the Grand and Petit Drus, another night out owing to a snowstorm.

The next year an attempt on the Aiguille Verte by the Moine ridge was nullified by the enforced rescue of a solitary climber, but the Grépon was traversed, as also Monte Rosa by the E. face from Macugnaga to Zermatt, another first British guideless expedition; the Rimpfischhorn with ladies, and the traverse of the Wellenkuppe and Gabelhorn.

In 1910 the principal ascents were those of the Disgrazia by the N. face, a very difficult ice climb done for the first time and not repeated since, and the ascents of the Scerscen and Bernina.

For the next two years, owing to an accident, his energies were restrained, but in 1913 he led a mountaineering and exploring party to the Caucasus, where his knowledge and tact, coupled with his powers of organisation, made him an ideal leader. The travelling covered about 300 miles, and seven mountains were climbed and many passes crossed. Five of the mountains were climbed for the first time and were very difficult : Tur Choch, Ullar Choch, Tschantschachi Choch, which took forty-five hours, Mamison Choch, and Nuamquam. Elbruz, 18,400 ft., was also ascended, and a determined assault on Ushba, the double-headed Matterhorn of the Caucasus, which extended over five days, was only defeated by the condition of the mountain.

The next year, 1914, saw him back again in the Caucasus, and two new passes were crossed and four new mountains ascended : Bubis Choch, Karagom Choch, Vologata Choch, and Laboda. The last-named was climbed on August 1, and on descending to the valley it was found that the world was at war. Many adventures were met with on the journey home across the Black Sea to Constantinople and up the Adriatic, and England was reached on September 2.

He had always been theoretically interested in aviation and tried hard to join the R.F.C. ; but his age was against him, and he found an outlet for his patriotism in an aeroplane factory, where he worked fifteen or sixteen hours a day. With the exception of an occasional two or three days in the Highlands or the English Lake District, the mountains had to be left alone till the war was over.

In 1919 what was perhaps the most daring of all his expeditions was carried out—the solitary traverse of the ridges of the Meije, which had always strongly attracted him.

But more ambitious projects still were maturing. In 1920 he set out for the Himalaya. He wished to visit Kangchenjunga, and if possible get an idea of the approach to Everest. The Guecha La was crossed and the Talung glacier descended ; but conditions were bad, and a return was made to Darjeeling. A later expedition crossed into Nepal by the Chumba La, crossed the Semo La passes between 15,000 and 16,000 ft., and ascended the Tallung glacier. The highest camp was pitched below the highest point of Kangchenjunga at 20,000 ft., and about 1000 ft. higher was reached ; but the face of the mountain was impossible, owing to continuous avalanches. The return was made to Darjeeling by a new pass, the Rathong La, between 18,000 and 19,000 ft.

The attempt on Mount Everest was projected for 1921, and by reason of his experience and skill the choice of leader of the mountaineering part of the expedition fell naturally on Raeburn. Before he set out he was exceptionally hard-worked in organising supplies and equipment when he was suffering from influenza, and in India also he was rather overdone, so that when the expedition reached Tibet, and dysentery broke out amongst them, it took

great hold of him, and he had to be carried back under difficult conditions over a high pass to Lachen in Sikkim, in a very weak state. For two months he was in hospital, but as soon as he was up again his unconquerable spirit drove him across country, and after an arduous journey, which involved wading icy streams and much hardship, he rejoined the expedition.

He went with the party up to 22,000 ft., but it was by sheer will-power. He had shot his bolt, and although he was able to do the return journey to Darjeeling and home, the effort was a great strain, and after he got home a complete breakdown supervened, and for four long years he was gradually getting weaker, till the end came. The spirit had always been stronger than the flesh, and large drafts had been made on his reserve. This breakdown was a great disappointment to him at the moment of the supreme ambition of his life, the assault on Mount Everest.

He was elected to the Alpine Club in 1904, and was a frequent contributor to the JOURNAL, his papers including: 'Some Traverses in 1906' ('A.J.' 23, 425); 'Gran Paradiso by the S. face' (23, 592); 'Dent Blanche by the E. Ridge' (24, 627); 'Bec de l'Invergnan by the E. Ridge' (24, 321); 'Disgrazia by the N. Face' (25, 691); 'In the Caucasus, 1914' (29, 142); 'The Western Ridge of the Meije' (33, 215); 'The Southerly Walls of Kangchenjunga and the Rathong La' (34, 33). In 1920 he published an extremely valuable book entitled 'Mountaineering Art,' which is one of the standard works on mountaineering.

He was a delightful travelling companion; his thoughtfulness and care for others, his wide experience and extensive knowledge of all natural features, birds and flowers, endeared him to all his friends, and his death leaves a void which cannot be filled, in the loss of a trusty comrade, a well-trying friend, and an indomitable spirit. May the soil rest lightly upon him.

W. N. LING.

NEW EXPEDITIONS (1910; 1925-6).

Cottian Alps.

AIGUILLE DE CHAMBEYRON (3409 m. = 11,155 ft.), BY THE N. AND N.W. FACES. July 11, 1926. MM. Jean Coste¹ and Paul Guilleret. From a bivouac (left at 02.00) near Chillol in the Val de Mary glen of the Ubaye valley, the party crossed the Marinnet glacier, making for the base of the long and steep couloir seaming the N. face of the Aiguille de Chambeyron which abuts against the watershed at a

¹ M. Coste perished on the Meije a few days later.—A.J. 38, 346.

point W. of the summit and between it and the 'Great Tower'—now christened 'Tour Coolidge.' Crossing the almost invisible bergschrund, the party cut up the couloir as quickly as possible. This latter gets steeper and steeper, especially its last 10 metres; the rocks being almost impossible, the party were obliged to stick to the couloir throughout till they attained its top at 08.00 (4 hrs. from the base). Turning slightly to the W. by an iced and exposed traverse, the party attacked the perpendicular but good and firm rocks of the N.W. face (these red rocks provide ample holds), and attained the top, 10.00 (1½ hrs.). Descent by the Chauvet glacier to the La Blachière oasis and so to Jausiers. From *La Montagne*, 1927, pp. 1-6.

Le Dauphiné.

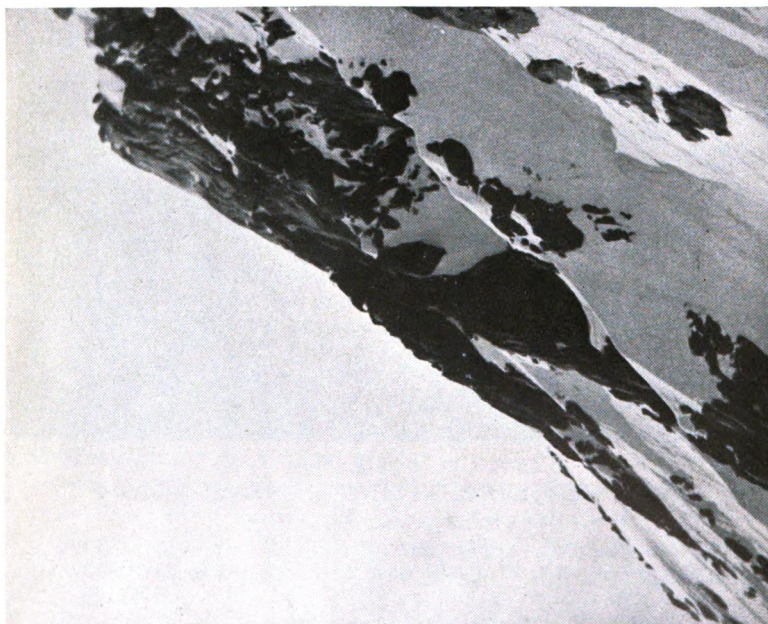
MONT PELVOUX (3954 m. = 12,973 ft.), BY THE N.W. (OR MOMIE) ARÊTE. August 28, 1926. MM. Pierre Dalloz and Georges Gaillard. From the Cézanne Club Hut the party, by the route of the Col de la Temple, attained the upper basin of the Glacier Noir. Thence, crossing the little glacier or great ² couloir descending from the N. slopes of the Pelvoux (3 hrs.) they mounted the couloir descending from the lowest gap—*Brèche de la Momie*—in the Pelvoux's N.W. arête. Before attaining the gap itself, they took a second couloir to their right, and crossed the watershed between the Momie and Noir glaciers approximately at a great rose-coloured rock gully draining into the Momie glacier. Up this gully, first by the rotten rocks of its left bank, then by firm ledges on the right bank; then, crossing the arête above the inlet of the gully they turned on the N.W. (Glacier Noir) slope, a huge tawny step (2½ hrs.). A notch in the arête was thence reached by a climb over good rocks and the following step, crowned with two teeth, was also turned to the N.W. Thence by a curious white quartz chimney, firm ledges, later a difficult chimney, they attained a buttress of the main arête. This spot is marked by 300 ft. ice gully. By a smooth slab they climbed back to the main arête and steered towards the Junction of the Momie and Violettes (N.E.) arêtes (1½ hrs.). This point is attained first by a traverse on the Momie face, followed after the Junction by a prolonged similar movement on the Violettes slope, regaining the arête at a great bastion above which the ridge flattens out. Thence a series of iced ledges, teeth, and steps, sometimes on one slope, sometimes on the other, brought the party to the now nearly level arête over which the Pyramide Durand was easily attained (3¼ hrs.) followed by their arrival on the Pointe Puiseux (½ hr.). Descent to Ailefroide by the *Violettes* glacier in 2½ hrs.! From G. H. M. *Annuaire*, 1927, pp. 49-50; marked illustrations p. 69.

² It was up this couloir, taking very late to the N.W. arête, that the first ascent of the mountain from the N.W. was originally made, *A.J.* 16, 49-50.



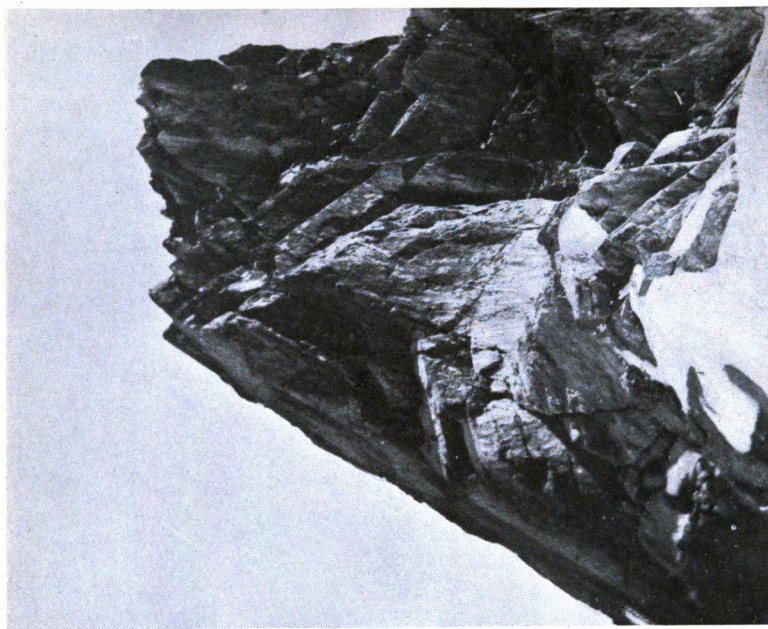
Phot. the late J. Coste.

N. FACE OF AIGUILLE DE CHAMBEYRON
from close below the summit.



Phot. the late J. Coste.

N. FACE OF AIGUILLE DE CHAMBEYRON.



Phot. the late J. Coste.

TOUR COOLIDGE.

PIC BOURCET (N.E. Summit or *Pointe Swan* 3697 m. = 12,130 ft.), BY THE W. ARÊTE. September 3, 1926. MM. Pierre Dalloz and Henry Bordeaux. From the Chatelleret Club hut to the S. bay of the Grande Ruine Glacier, the party mounted towards the *second* gap counting from the summit. Near the W. arête, and at about the level of the gap, they took a narrow ledge whence the crest was gained by a long and vertical chimney. Next a climb along the ridge—good firm rocks—turning the upper teeth by a traverse on the Etançons slope. A mistake was here committed; instead of attaining the floor of the *first* and very deep notch (described as a *Coup de Sabre*) by easy ledges on the W., they became involved in difficulties on the E. slope. From the deep notch a smooth slab was traversed on the E. slope and the arête regained, by an easy shallow chimney at a little notch close to a tooth. Crossing on to the Etançons slope, the party henceforward kept on that side not far from the crest, and by a series of cleft rocks, steep chimneys and gullies reached the *S. peak*, whence the *Pointe Swan* was attained by following the arête (3-4 hrs. from the 'deep notch'). From G. H. M. *Annuaire*, 1927, pp. 48-9.

[This route appears to be superior to previous ones and the rocks, in general, far firmer].

A variation of the *S.E. face* route is also reported in the current *Annuaire*, pp. 48-9.

PAVÉ (3831 m. = 12,570 ft.). *Traverse* TO PIC GASPARD (3880 m. = 12,730 ft.). September 12, 1926. MM. Pierre Dalloz and Albert Arnaud. From the summit of the Pavé (3½ hrs. from the Promontoire Club hut), by the rocks on right bank of the ice slope on the N.E. face, to the first step on the arête connecting the Pavé with the Pic Gaspard. Turn this step by a gully on the S. (Cavales) slope, and, by a chimney regain crest at a gap between the summit and a prominent tower. Passing over this tower—to which the name of *L'Ourson* appears to have been attached—and descending by narrow ledges on the N.E. slope, they attained the lowest depression, the so-called *Brèche Casimir-Gaspard*, between the Pavé and Pic Gaspard (1½ hrs.). From the depression, follow first the narrow rock ridge, then a ledge on the S. slope of Pic Gaspard's great N.W. arête. The party, leaving the ledge before its termination, then climbed steep rocks, followed by a short chimney, straight up to the arête. Then along the crest to the last step under the summit. A steep tooth is turned on the S. by a chimney and slab. An 100 ft. chimney, seaming the N. slope of the arête and close to an huge overhanging boulder, is next climbed and from it a little notch in the arête above the boulder, attained. A ledge, on the S. slope, interrupted by a bulging slab, is next followed and the arête, becoming more level, is reached by steep rocks. It is followed to the top (3¼ hrs.). Descent by the very rotten rock gully on the E., the party being caught in a storm and having to bivouac in the cliffs of the Cavales

glen. The expedition is highly recommended. From G. H. M. *Annuaire*, 1927, pp. 51-52.

[A traverse of Pic Gaspard, including the first descent of the S.W. face, is also reported in *Alpinisme*, January, 1927. The expedition was accomplished August 31, 1926, by MM. Pierre Chevalier and Marcel Sauvage. As the only new part was accomplished in the descent, we refrain from particulars or comment.—EDITOR.]

AIGUILLE DES ARIAS (3401 m. = 11,159 ft.), BY THE N. FACE. September 19, 1926. MM. Pierre Dalloz and Robert Hardouin. From the Alpe de Pin huts above St. Christophe, through the Mariande glen to the rocks forming the right bank of the E. bay of the Mariande glacier (2 hrs. 10 mins.). The party mounted these rocks in the direction of the Bec du Canard (3270 m.), then taking to the ice, skirted round to the N. buttress of the Aiguille des Arias. This steep buttress, some 2000 ft. high, is bounded on the E. by an ice slope. The party crossing the bergschrund ($\frac{3}{4}$ hr.), cut up the ice slope for some 300 ft. They took to the rocks at the base of two great slabby steps forming prominent objects on the said buttress. These two steps are climbed either by the crest or by slabs on the E. slope (1 hr. 20 mins.). Then straight up for 100 ft. followed by a traverse across a couloir on the left. Now up an easy gully enabling them to cross over a secondary and parallel ridge abutting against an overhang. They next climbed straight up the face and attained a minor point (1 hr.) separated by a deep gap from the summit. Across this gap and along the watershed to the top (20 mins.). Descent by E. face to La Lavey (3 $\frac{1}{4}$ hrs.). Times are very fast. The rocks are excellent throughout. From G. H. M. *Annuaire*, 1927, pp. 52-3.

Mont Blanc Group.

FLAMMES DE PIERRE DU DRU³ (3322 m. = 10,899 ft., *Vallot*). This is the principal tooth on the great S.W. buttress of the Aiguilles du Dru descending towards the Mer de Glace.

September 4, 1926. MM. D. Armand Dellile, J. A. Morin and H. de Ségogne. From the Charpoua Club hut, taking the route of the Petit Dru, party attained the ridge in the neighbourhood of Point 3308 m., *Vallot*; then, turning S.W., skirted a series of teeth by a diagonal descent of some 100 ft. in a chimney on the Charpoua slope. Thence a gully led them back to the ridge at the base of their tooth. The first vertical step is partly climbed and partly turned on its N. slope. Having attained a gap, a tower 90 ft. high, smooth and overhanging, now confronted them. Then by an, at

³ So named by Cav. Guido Rey. This route is merely described here as an example of the extremely thorough exploration of *all* points on ridges now undertaken by the 'Young French' school.

first, level, then ascending traverse, the party attained the base of a vertical and holdless chimney. This chimney lies between the tower and the true summit and brought them to the summit block which was then climbed direct (4 hrs., *excluding* halts). An easier way of turning the tower was discovered on the descent.

Following the questionable French and Italian custom of giving 'personal' names, it is proposed to call the tooth, *Pointe Michelle-Micheline*. From *La Montagne*, 1927, pp. 24-5.

AIGUILLE SANS NOM (3989 m. = 13,088 ft., B.I.K.), BY THE W. ARÊTE and traverse to AIGUILLE VERTE (4127 m. = 13,541 ft.). This magnificent expedition was accomplished September 21, 1926, by Mademoiselle G. de Longchamp with Armand Charlet and Marcel Bozon.

From the Charpoua Club hut by the route of the Grand Dru to the base of the great couloir descending from the *Brèche sans Nom*: thence the party easily crossed the bergschrund and scaled the lower rocks by two difficult chimneys; next they followed the couloir itself for some 300 ft., only narrowly avoiding a great fall of rocks which obliged them to take to the true left bank of the couloir. They then climbed a perpendicular chimney followed by another providing bad holds, then, bearing to the right, E., by easy rocks, followed by convenient ledges were able to climb diagonally back to the left, W., into the couloir itself, some 600 ft. below the Brèche. Up the couloir, no difficulties save a few smooth loose rocks to the Brèche, attained in 3 hrs. from the bergschrund.⁴

From the Brèche, *descend* some 30 ft. on the S. slope of the Aiguille's W. arête, whence a short overhanging chimney and a very difficult slab lead to a great platform. From the extreme edge of this platform, a very short *descent* followed by another difficult 30-ft. chimney brought the party to the top of the first step. Now, easily, by a series of rock terraces, some 100-150 ft. below the crest of the arête, to the base of a vertical wall seamed by several clefts. Bear to the right, N.E., by a traverse of some 150 ft.; turn a little rib and by a steep slab, good holds, attain a 30-ft. high and difficult chimney. Up this chimney, followed by a longer and wider one. These two chimneys are succeeded by others, all of which are climbed—one overhangs at its base—and lead eventually to a very small

⁴ This appears to be the third time that the Brèche sans Nom (3725 m. *Vallot*) has been attained; the first occasion being on July 28, 1890, by the Wicks-Morse-Carr party while making the first ascent of the *Pic sans Nom*, on which occasion the couloir was followed throughout, and the Brèche attained in 5 hrs. from the bergschrund, *A.J.* 15, 297-8; 335-40. The second occasion was on July 10, 1901 by M. Emile Fontaine with Joseph and Jean Ravanel when making the second (? and last) ascent of the *Pic sans Nom*.

terrace in the floor of a chimney. A very awkward traverse to the left, W., of some 40 ft. is next accomplished till another short and abrupt fissure leads to easy terraces. The party then attained, without difficulty, the base of a great boulder forming an outlier to the first peak or *Pointe Petigax*.⁵ Turn this boulder on the Charpoua slope and follow the narrow snow arête climbing the first and turning the second of two teeth by its N. or Nant Blanc slope, whence a difficult and glazed chimney leads back to the arête and an exposed climb of some 20 ft. finally with one's back turned to the Verte, lead to the *Pointe Petigax* (3½ hrs.).

Thence the party followed approximately the route of the first explorers⁶ to the summit; after descending the first gap by a spare rope, they kept almost entirely on the rocks of the S. slope except at one point where a traverse on the N. had to be made. The summit or *Pointe Croux*, was attained at 13.00 (2½ hrs.). The very sharp ice arête⁷ leading to the snow dôme of the *Aiguille Verte* was turned by the not easy rocks and ice of its S. slope, at the end of which a short snowy rib was climbed to the *Calotte* and the top of the *Aiguille Verte* itself, 14.00 (1 hr.). Descent by the ordinary or 'Whymper' route.

The times, including halts, are as follows :

Charpoua Club hut	.	.	.	.	.	03.00
Bergschrund	.	.	.	.	.	04.00
Brèche sans Nom	.	.	.	.	.	07.00
Pointe Petigax	.	.	.	.	.	10.30
Pointe Croux	.	.	.	.	.	13.00
Aiguille Verte	.	.	.	.	.	14.00
Bergschrund	.	.	.	.	.	19.00
Couvercle	.	.	.	.	.	20.00

From G. H. M. *Annuaire*, 1927, pp. 94-6.

Bernina (W. Wing) Group.

PIZZI GEMELLI (3259 m. = 10,693 ft., *S. map*; 3264 m., *Lurani*) N.W. NEEDLE. June 21, 1925. Herren F. Baumann and H. Rütter with Chr. Klucker made the first ascent of this needle which lies immediately to the E. of Colle dei Gemelli. From the col, they mounted the steep snow gully about half-way between the needle and the principal summit, then took to the rocks on the left and gained the N.W. face by means of a narrow, horizontal ledge. In the lower part of the face some steep cracks, leading straight upwards, were climbed, whereupon the rocks became nearly per-

⁵ Named by H.R.H. the Duke of the Abruzzi, as also the E. peak, or *Pointe Croux*. The portion of the climb between the Brèche and *Pointe Petigax* is new.

⁶ *A.J.* 19, 243.

⁷ *A.J.* 21, 261-3, 509-17.

pendicular, and in one place slightly overhanging. Some steps directly below the summit are very difficult, the rocks affording no holds worth speaking of. The climb on the face, which is exposed throughout, began at a spot about 25 ft. to the N. of the nearly perpendicular and unscalable S.W. ridge, and, a few feet below the summit, the party found itself within 3 or 4 ft. of the aforesaid ridge. On the summit you can sit nowhere without holding on with your hands. On the descent the last man roped himself down a very steep gully more to the N. Time: Colle dei Gemelli to summit, 1 hr.

Note.—The Pizzi Gemelli (Twin Peaks) were so called by the inhabitants of the Bregaglia valley, whence they appear as Twins. The needle, the ascent of which has just been described appears as the higher of the Twins as seen from the Bregaglia; the one nearer to the valley. It may be about 170 feet lower than the principal summit to the S. This latter consists, however, in a horizontal summit ridge running N.W. and S.E.

Now it is a curious fact that in alpine literature only the principal summit is called 'Gemelli,' the Twins being apparently represented by the N.W. and S.E. ends of the summit ridge (the latter not visible from the Bregaglia valley). The Gemelli Needle is completely ignored in alpine literature although it is one of the Twins which gave the group its name. To call the principal summit 'Gemelli' is quite wrong, as any mountain with a horizontal summit ridge might then be thus named. Moreover, the inhabitants of Val Bregaglia give that name to *both* peaks. It is to be hoped that future *Climbers' Guides* will correct the error.

To elucidate this matter was not the least of the reasons for the above described climb.

H. RÜTTER.

[I entirely concur with Herr Rütter's note.—E. L. S.]

FORCOLA DELLO SCALINO (*ca.* 3048 m. = 10,000 ft.). No height or name on *S. map*. Between Lo Scalino and Cima di Cantun. July 2, 1926. Herren F. Baumann and H. Rütter with Chr. Klucker made the first traverse of this col, which has often been reached from the easy Forno side, but never from the Albigna. The party ascended the Cantun glacier to the W. foot of the col. The task consists in climbing a very steep névé and ice wall. After crossing the bergschrund the party cut right up the face. About 60 ft. below the col some rocks pierce the ice coating. The party climbed those to the left, N., which are slabby and afford only precarious holds. Then to the right, and over névé to the col.

This ascent, which was effected in 2 hrs. 10 mins. from the base to the col, is exceedingly steep in its upper part, and must be considered as difficult. It adds to the previous expeditions from the Albigna hut a new col from the Albigna to the Forno glacier, the interesting ascent of Lo Scalino from the south, and Cima di Cantun

by the N. arête. From the col the party crossed Lo Scalino from S. to N. This traverse was rather difficult owing to much snow and ice covering the rocks.

CASTELLO (2926 m. = 9599 ft., *S. map*). July 1, 1926. Herren F. Baumann and H. Rütter made the first ascent of this the westernmost rock pinnacle of the W. arête of *Cima di Castello*. Starting from the Albigna Club hut and following the route of the Zocca pass, a short climb in a broad couloir in the S. face and to the W. of the top brought the party to a spot from where two broad ledges (the upper one more in the nature of a gully) slant upwards from W. to E. The lower ledge was followed to its end. Thence over a narrow ledge and round an awkward corner to a steep and exposed slab which was climbed with difficulty. Now easily along a grass-grown, horizontal ledge in a north-westerly direction to a steep gully which leads to the W. arête. Over this latter the top was reached without difficulty; 4 hours from Albigna Club hut. In the descent the upper ledge was followed without any difficulty. The exposed slab can thus be avoided.

H. RÜTTER.

Julian Alps.

TRIGLAV (TERGLOU), 2863 m. = 9400 ft., BY THE N. FACE, 'SLOVENE' ROUTE.⁸ August 22, 1910. Dr. H. Tuma with J. Komac.⁹

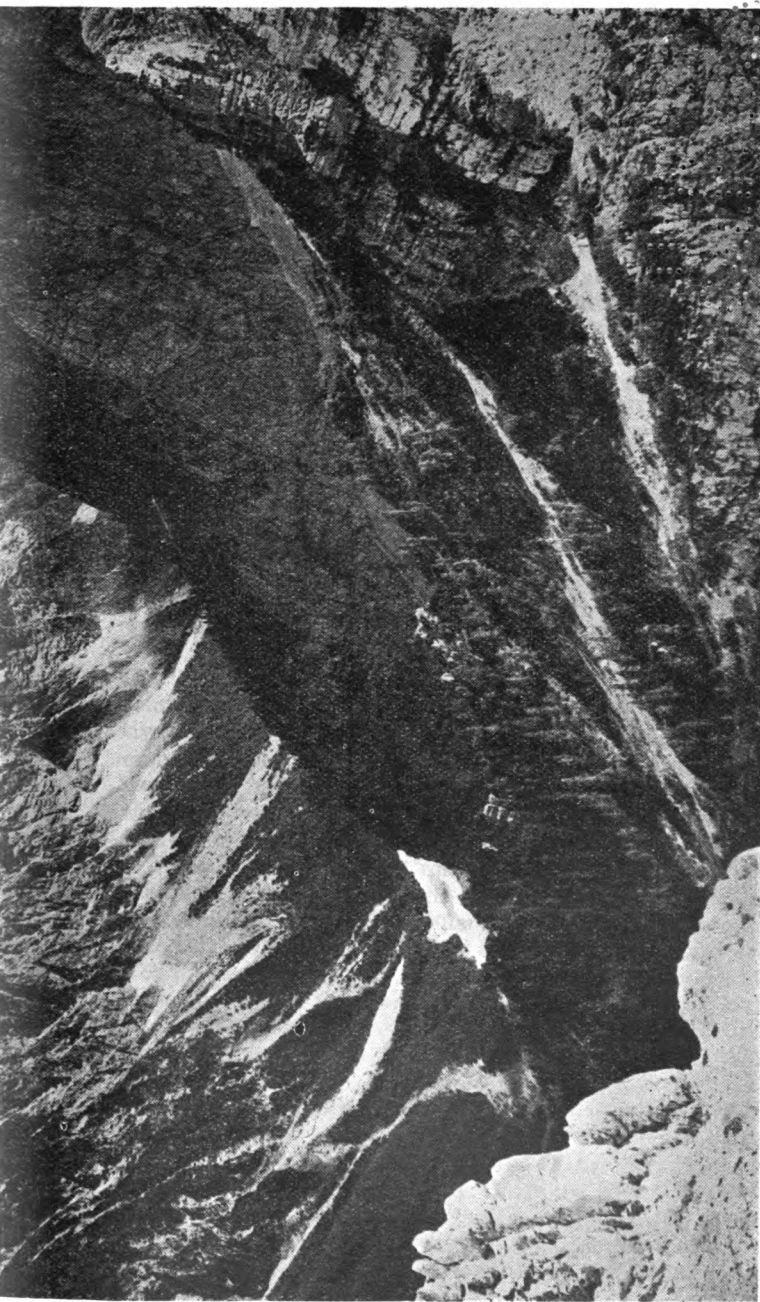
From the Aljaž Club hut the route follows the path across the Bistrica to the Prag and thence to the rocky gully at the foot of the Triglav's great N. face; path is left at a level spot near a scrub-clad buttress, by which buttress access is obtained to the face (04.30, or 1 hr. from hut). Climb up steep rocks in direction of four larches visible from the hut; bear slightly to the right and by a (sometimes non-existent) snow slope gain access to base of *first* chimney ['i']. Up this chimney, which is nearly 1000 ft. long, easy at first, then difficult. Final 8 metres very difficult and only climbed by standing on one another's shoulders. This first chimney is the longest (1 hr.) and is conspicuous by a yellow-streaked pinnacle above it ['a']. Near the larches turn right from the chimney and climb a wide grey rock face ['b'] to a nearly level ridge; to the right is the base of the *second* chimney ['ii']. Climb the chimney, to the left of which rises a second yellowish pinnacle ['c']. From top of the chimney turn to the right and scramble over its right (ascending) edge by a crack, and the main wall, seamed by the *third* (snow-filled) chimney ['iii'] rises in front of you. A waterfall ['e'] here streams down

⁸ The original, or 'Austrian' route, by Herren F. König, H. Reinl and K. Dommenig, July 9-10, 1906, is described, together with some later variations, in *Hochtourist*, iii., pp. 466-8, with a marked sketch. These lie further E. than the 'Slovene' route. The height of the face is about 6000 ft.

⁹ By the courtesy of Doctor Tuma and Mrs. Copeland.

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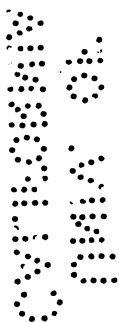




Phot. E. Planinsek.

THE N. FACE OF THE TRIGLAV.

The three main routes are all marked alike, but they are quite easily distinguished by their position. The right-hand route, with interlacing variations, is the Austrian route; the Central Route is recognisable by the zig-zags up the ledges; the Slovene Route is the one furthest to the left, one variation of it is Dr. Pavel Kunaver's route, the comparatively straight route is Dr. Tumas's. The dotted line to the extreme left indicates routes followed at one time or another in recent expeditions up the Wall.



from the Triglav glacier. Now by the rocks to the right, *or* straight up by snow, to the base of this third chimney ($1\frac{3}{4}$ hrs.). The waterfall is now the general direction. Turn a short vertical step by a ledge and the main difficulties are finished. Mount the wall, with the waterfall always to the left, by gullies and ledges till you attain its top not far from point 2464 m.—close to a chamois pass (1 hr. 20 min.). Now up a steep snow slope and then pass on to a buttress abutting against the Veliki Triglav main N. arête. Mount this long arête, not difficult but sharp brittle rocks, direct to the summit (2 hrs. 10 mins.). Descent by ordinary route to the Aljaž Club hut, attained at 16.20.

'A very striking climb and the best in the Julian Alps.'

(Figures and letters in text refer to marked diagram of the face).

This expedition was repeated in 1911 and again, with slight variants, on account of flowing water, by MM. Kveder, Cop, Volkur and Jug, July 23, 1922.¹⁰ Their route is, in general, slightly to the E. of Dr. Tuma's, and was accomplished in 6 hrs., including halts.

'NOTES ON THE CENTRAL ROUTE OF THE N. FACE OF THE TRIGLAV, A VARIATION OF THE "AUSTRIAN" ROUTE.'—By M. Ivan Rožman, who has made the ascent by all three routes.

[Besides the well-defined 'Austrian' and 'Slovene' routes up the Triglav Wall—as the Slovenes call the N. face—there is a third, central one, which is generally spoken of as the 'Central, or Alternative Austrian Route,' because it has the same starting-point as the original 'Austrian' route. The following brief description of it was kindly given by M. Rožman, of Ljubljana (Laibach), one of the party which made the ascent a few years ago, the only one so far, apparently.]

Access to the 'Central' route is gained by the same opening in the Wall as that which leads to the 'Austrian' route, and for a matter of 300 m. the two routes are identical. Upon reaching the first ledge, however, the 'Central' route branches off to the left. You follow the ledge until you find a traverse which leads to a second ledge higher up. At the end of this there is another traverse, which leads to a third ledge—see photograph. From the end of this ledge—which of course takes you to the left again—there is an easy traverse to the 'Slovene' route. If you continue to follow the 'Central' route, you have now to scale a boulder, not difficult to negotiate, which takes you to the fourth ledge. Here you bear to the right, reaching the gully this side of the Black Boulder, which is the distinctive feature of the 'Austrian' route. Here you keep to the right of the pinnacle on the scree, returning to the face of the rock and proceeding upward over a succession of smooth slabs. The next stage is up by a crack—scarcely sufficiently defined to be

¹⁰ Kindly communicated by MM. Kunaver, Kveder and Mrs. Copeland.

called a chimney—access to which is difficult. Then follow about 30 ft. of perpendicular rock. Above this you come out upon the 'Kugy' ledge close to the permanent snow around the Triglav glacier. From this point onward you have the choice of several well-known routes—*either* to follow the usual route to the left over



N. FACE OF TRIGLAV WITH 'SLOVENE' ROUTE.

the glacier to the Kredarica (where stands the Triglav House, see photograph), *or* to turn to the right by the 'Kugy' ledge and so on to the Alexander [? Aljaž] House, *or* to continue straight up the W. arête of the Triglav as far as the summit. The route up this ledge is not marked on the photograph, but it offers no special difficulty to a reasonably experienced climber.

ŠPIK (2472 m. = 8100 ft.), BY THE N. FACE. The Špik is the outermost of a semicircle of peaks in the Julian Alps, reaching out from the N. crags of the Škrlatica to the valley of the Pišnica behind

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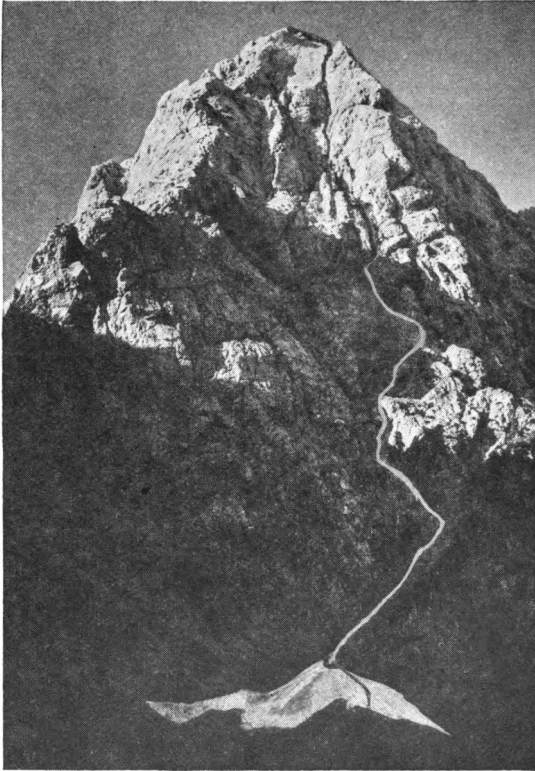


Phot. J. Ravnik.

N. SLOPE OF THE SPIK WITH THE HEAD
OF MARTULJEK (JULIAN ALPS).

Kranjska Gora. The group curves round a shallow wooded valley, which, strictly speaking, alone has the right to the name of Martuljek. But in practice the name is extended to the surrounding peaks as well, and the whole massif is referred to collectively as the Martuljek.

What with steep screes and snows, wearisome to cross and giving access to cliffs none of which are easy to scale, the Martuljek is



Photo, S. Tominšek.]

N. FACE OF ŠPIK.

outside the orbit of the ordinary excursionist and has come to be regarded as a sort of cragman's reservation in the Julian Alps. The most remarkable of the peaks is the Špič (2472 m.) Shaped like a pyramid set on high, the mountain is at once the climax and the end of the group. Its W. shoulder joins on to the Mala Ponica (Little Pontsa); but to the S. and E. its crags sink down to the forest slopes that stretch downward to the meadows beside the Pišnica. From this side the summit is conveniently accessible, and there has been laid out one of those excellent marked paths by which

you can ascend almost any peak in the Slovene Alpine country, without greater gifts for mountaineering than good walking powers and a good head. The N.E. face is a climber's route, but not a difficult one. The W. ascent is by a ridge, and a fairly exacting climb. Towards the N. the Špik shows like a perfect pyramid with a wall, inferior in size to the great Triglav Wall, but even more forbidding. In virtue of its striking appearance and the technical difficulties besetting an ascent, it presented an attractive but baffling problem to mountaineers in the Eastern Alps, and, so far as is known, the N. face of the Špik had never been scaled before this autumn. There is no record of its having been climbed by German mountaineers before the War, and the very possibility of scaling it has been called in question. An ascent was made in the summer of 1925¹¹ by Angelo Dibona (of Ampezzo) ; but he left the true N. face before he reached half-way, bore to the right, and gained the summit by the comparatively easy crags further W. The best, although unsuccessful, attempt was made on August 6, 1926, by M. A. de Reggi and M. E. Držaj, two Slovene mountaineers, of Ljubljana. They got into difficulties among the overhanging rocks, and were overtaken by one of those cataclysmic downpours that have been a disastrous feature of this summer's climate in N. Yugoslavia, and the cause, directly and indirectly, of an unusually large number of fatal accidents in the mountains. Shortly afterwards the first successful ascent was made by Madame M. M. Pibernik and Dr. Stane Tomišek on September 5, 1926. Shortly after the first ascent, the Špik Wall was again climbed, this time by MM. E. Držaj and St. Hudnik. The two men took some six hours less over the climb than Madame Pibernik and her companion, but they had the experience of their predecessors as well as that of M. Držaj to go upon.

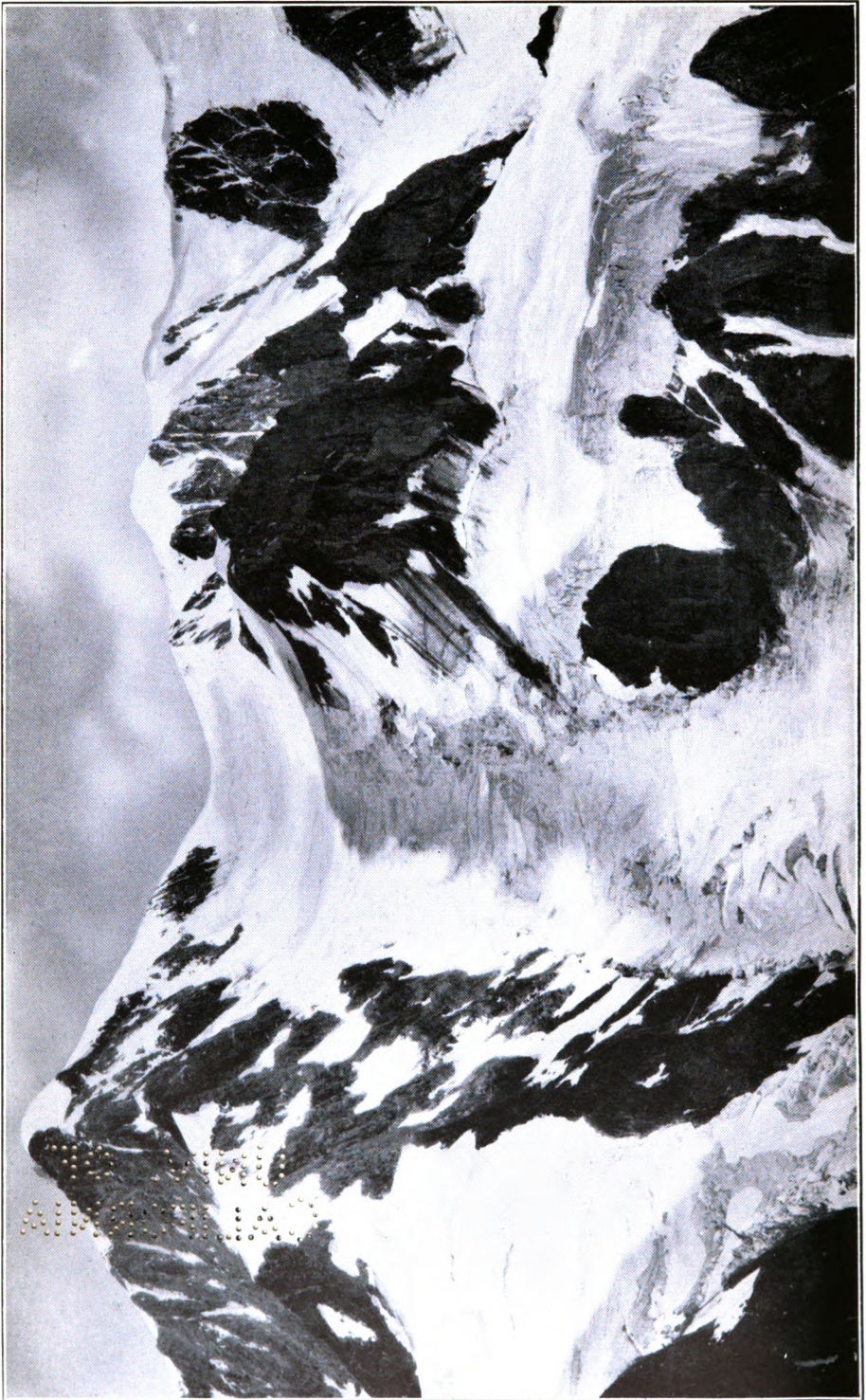
We publish the following note of the first ascent, by the courtesy of Mrs. Copeland and of Madame Pibernik herself, who *led* throughout the ascent :

Sept. 4, 1926. Party reconnoitred the route.

Sept. 5. Party followed hunter's track to the wooded height known as Pod Screm, and, by 0.800 had scaled the gully which leads to the right of the N. face or wall. From the gully up the main chimney by its true left bank to a conspicuous yellow scar or fault, whence easily to the right over a gravelly ledge under a chimney, passing a cairn probably erected by Dibona where he deflected up the N.N.W. face. From the cairn by a chimney to a great boulder conspicuous from the valley, then over awkward rocks and steps (piton) and over scree to a reddish hollow and along a great ledge to a recess. Thence to the left up a vertical cleft (piton), followed by a traverse to the right and a convenient chimney whence the top of

¹¹ October 11, 1925. According to *Der Bergsteiger*, 1927, No. 3, Dibona deflected but quite slightly—the weather being too cold for a bivouac—and his route joins that of Madame Pibernik under the summit. Herr A. Escher was Dibona's companion.

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Aiguille de Bionnassay from Col Infranchissable, showing Minge Arête and Glacier de Bionnassay italien.

Photo P. Montandon.

a boulder, well seen from the valley, is attained (17.00 hrs.); as above here the wall or N. face rises unbroken, bivouac accordingly till 06.00 following morning.

Now by an exposed traverse to the right (2 pitons) followed by a slab and chimney to a convenient but narrow shelf. Thence by a chimney and chockstone, the latter turned to the right—very exposed—and again by the chimney to a terrace. The wall still rises unbroken at an angle of about 85° and forms here a sort of wide recess. Up a kind of fissure in the left-hand (ascending) part of the wall—difficult—to two projecting 'shelly' flakes of rock. These are firm, and by wedging in the innermost angle of the recess, height is gained. Then a very difficult traverse to the right¹² (pitons)—the worst part—till base of another chimney is attained. Up this chimney to an overhang and over this to a U-shaped gully, and then, easily, to the summit (16.00). The party had spent 31 hrs. on the N. face. Descent by ordinary route to Kranjska Gora.

VARIOUS EXPEDITIONS.

Mont Blanc Group.

AIGUILLE DE BIONNASSAY (4066 m. = 13,341 ft. B.I.K.), BY N. FACE. Second ascent. August 17, 1926. Mr. E. G. Oliver with Adolf and Alfred Aufdenblatten. Left Tête Rousse, 03.30. Descended on to glacier and crossed. Delayed about half an hour waiting for daylight. Made for couloir to right of large mass of rocks on face of Aiguille and up this to reach a smaller mass of rocks to our right, W. (04.45). Waited on account of the indisposition of one of the party and because of ominous cracking of séracs above. Discussed returning. Finally decided to proceed. Started up couloir to left of another large mass of rocks—05.30—good snow—moved fast to point above séracs out of danger (06.45). Halt owing to renewed indisposition of one of the party. Discussed retreat, but decided to proceed (07.15). Upwards again, at first snow, then ice, to place just below bergschrund, 08.16 halt. Left 08.30 through steep séracs and over bergschrund—steps in hard ice over lip and above. Thence traverse to left, E., towards a rocky point to the W. of the summit until below another bergschrund (09.40). Started 09.50, traversing to left under rock point, until apparently below summit. Here thunderstorm came on (10.00)—took shelter in large crevasse. Started again 10.50, making straight for apparent top. Step-cutting on steep slope through powdery snow into ice. Reached Tricot (W.) arête 12.05. Top 12.15. Halt on first rocks of the Miage arête 12.30. Thunderstorm, heavy hail and snow. Wound rope round rocks. Started again 13.05, and reached foot of rocks 13.45. Rocks covered

¹² The second party avoided this spot by ascending the *right*-hand side of the recessed face.

with new snow. Thunderstorm again. Halt till 14.30. Col de Miage 15.15. Châlets de Miage 17.30. St. Gervais 19.50.

PETITES JORASSES (3658 m. = 12,002 ft., B.I.K.). August 27, 1926. Messrs. C. G. Markbreiter and W. B. Carslake with Evaristo Croux. The party, when near the rock wall separating the Frébouzie glacier from the upper snows of the Aiguille de



Photo, W. B. Carslake.]

PETITES JORASSES FROM THE S.

Leschaux, turned left (W.) and crossing the bergschrund of the glacier arm running W.S.W. at its extreme W. end, cut steps for half-an-hour up very steep snow so as to reach the snow arête running E.N.E. They followed this arête for 10 mins., then bore slightly to their right (? E.) till the S. buttress route was joined. Then, climbing up by rocks (5 mins.) and a curious trench or snow gully, attained the snow dôme to the E. of the true rock summit (1½ hrs. from the bergschrund to top). This route, said to be partly new, is a variation of the Mayer-Dibona 1913 S.W. face route, 'A.J.' 27, 445. The bergschrund is usually inaccessible. The snow arête, much fore-shortened, is shown in the accompanying photograph.

AIGUILLE DE LESCHAUX (3370 m. = 12,365 ft., B.I.K.). Same party and date. From the Petites Jorasses (left at 08.45), party traversed back over snow dôme and down short snow slope (8 mins.) on to rocks of N.N.E. arête of Petites Jorasses, then worked across S.E. slope of arête by fairly steep and mostly rotten rock, descending very gradually all the time, until they gained snow slopes of highest portion of Frébouzie glacier about 50 ft. below the (? unnamed) col between Petites Jorasses and Aiguille de Leschaux (1 hr. 20 mins.). Next they traversed snow slope to small rock rib near its E. end, mounted the rib (5 mins.) to gain the heavily corniced E.S.E. arête of the Aiguille leading almost to the summit. The final bit is good rock (5 mins.). On the descent, the party kept down same route nearly as far as the rock rib, then direct down snow slope to rocky barrier separating highest portion of glacier from lower part, then along barrier to the lower part of the glacier, which, keeping well out in the centre to avoid crevasses in its upper portions, brought the party back to the shelter (14.15).

The double traverse is interesting and affords wonderful views.

TRAVERSE OF AIGUILLE DU JARDIN (4035 m.)—GRANDE ROCHEUSE (4103 m.)—AIGUILLE VERTE (4127 m. = 13,541 ft., B.I.K.). August 19, 1926. Mlle. G. de Longchamp and M. A. Jacquemart with Armand Charlet. This magnificent expedition, possibly new as a combination, includes a partly new variation in the ascent of the S. face of the Aiguille du Jardin. The portion of the route situated between the Aiguilles du Jardin and Verte took only $3\frac{1}{4}$ hrs. The most interesting part of the arête is stated to be the passage of the so-called *Col Armand Charlet*, between the A. du Jardin and Grande Rocheuse. [Relics of the Meyendorff¹ tragedy of 1925 were discovered during the ascent of the A. du Jardin. They include a rucksack, axe and ropes, one of which was still *en rappel*. The MM. Meyendorff were thus attempting the descent by this route and not by the Grands Montets arête as was at first supposed.] The descent of the A. Verte was accomplished by the 'Whymper' route which was dangerously swept by avalanches; the party, however, appear to have contrived a safe descent by first following the left bank of the main couloir and then taking to a rib separating the said couloir from a secondary one further to the E.

Times (including halts):

Couvercle, dep.	.	.	.	.	.	00.10
Bergschrund	.	.	.	.	.	02.50
A. du Jardin	.	.	.	.	arr.	09.15
					dep.	10.15
A. Verte	.	.	.	.	.	13.00
Couvercle	.	.	.	.	.	17.30

¹ *A.J.* 36, 424.

The expedition is described as one of the finest in the Mont Blanc Group. From G. H. M. *Annuaire*, 1927, pp. 85-8; 120. See also *Guide Vallot*, ii. which gives very full details of the Aiguille Verte 'Ridge.'

Pennine Alps.

ALPHUBEL (4207 m. = 13,803 ft.), BY THE W.S.W. ARÊTE (*Rothen-grat*) AND S. FACE. July 27, 1926. Messrs. E. B. Beauman and W. B. Farrington with Johann Brantschen and Karl Pollinger. From the Täschalp 2 hrs. walking brought the party to an easy snow and rock arête which is followed for 2 hrs. to the foot of the S. face of the Alphubel proper. Now climb interesting rocks (20 mins.), till it becomes necessary to traverse to the right, E., across a steep slab for some 40-50 ft. This slab can be called a wall and is crossed by an indeterminate crack sloping downwards and affording but slight footholds; handholds are also very deficient and there are no good anchorages available. Thence climb interesting rocks more or less straight up the face to the summit (2½ hrs.).

The climb is stated to be one of the most interesting in the Zermatt district and although practically unknown, was repeated by another party on the same day. The 'times'—some 7 hrs. from the Täschalp—are quick.

ALPINE NOTES.

THE ALPINE CLUB OBITUARY :	Date of Election
Johnson, A.	1870
Leaf, W.	1871
Maitre, J.	1888
Borghese, Prince Scipio	1898
Raeburn, H.	1904

'BALL'S ALPINE GUIDE,' THE WESTERN ALPS.—The edition (1898) by Mr. Coolidge covers the Maritimes, Graians, Dauphiné, Mt. Blanc group, and Pennines to the Simplon. With maps of each district, 1 : 250,000, and a general map. Price 10s., or 10s. 4d. post free. Obtainable from any bookseller or the Assistant Secretary.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART I.—The edition (1907), by Rev. A. A. Valentine-Richards, covers Switzerland and N. of the Rhone and the Rhine. With nine maps, 1 : 250,000, and a general map. Price 5s., or 5s. 4d. post free, or unbound 2s. 6d., or 2s. 10d. post free. Obtainable as above.



Phot. E. R. Beauman.

SLAB ON S. FACE OF THE ALPHUBEL.



Phot. Gustav Sommer.

The Coaz Club Hut (S.A.C.) and the Sella Group.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART II.—The edition (1911), by Rev. G. Broke, covers the Alpine regions S. and E. of the Rhone and Rhine as far as the Adige, *i.e.* the Lepontine, Grisons, Rhaetian (including Bernina), Ortler and Adamello groups. With nine maps, 1:250,000, and a general map. Price 5s., or 5s. 4d. post free, or unbound 2s. 6d., or 2s. 10d. post free. Obtainable as above.

'GUIDES DES ALPES VALAISANNES.'—

Vol. I. Col Ferret to Col de Collon, by M. Kurz, 10s.

Vol. II. Col de Collon to Col Théodule, by Dr. Dübi, 9s.

Vol. III. Col Théodule to Weisstor, by Dr. Dübi, 8s.

Vol. IV. Col Simplon to Furka, by M. Kurz, 8s.

At Stanford's, Long Acre, W.C. 2.

'GUIDE VALLOT.' Vol. I. LES AIGUILLES DE CHAMONIX.—Par J. de Lépiney, E. de Gigord and Dr. A. Migot, with 39 route-marked illustrations and 2 outline maps. Paris: Fischbacher, 33 rue de Seine. 1925.

This admirable Climbers' Guide is a complete monograph of the Aiguilles and may be said to be a much enlarged and more elaborate 'Kurz' or 'Mont Blanc Führer.'

'GUIDE VALLOT.' Vol. II.—L'AIGUILLE VERTE, par Henry de Ségogne, E. de Gigord, J. de Lépiney, J. A. Morin, with 34 route-marked illustrations and 5 maps. Paris: Fischbacher, 33 rue de Seine. 1926.

A CLIMBER'S GUIDE TO THE ROCKY MOUNTAINS OF CANADA.—By Howard Palmer and J. Monroe Thorington, published for the American A.C. by the Knickerbocker Press, N.Y., 1921. This very useful summary, with several maps, of what has been done in the Rockies to 1921, can be obtained from the Assistant Secretary, 23 Savile Row, price 7s. 6d.

LES ALPES DE SAVOIE.—Vol. VI., Part I., by Commandant Emile Gaillard, M.C. (Dardel, Chambéry, 27 fr. 50 post free), covering the groups Trélatête, Bionnassay-Gôûter, M. Blanc, Brouillard-Pétéret, and Maudit-Tour Ronde, with skeleton maps of each group and several marked sketches, has just appeared. It follows generally the plan of the Kurz guide, and includes the full information of all recent climbs.

Part II., covering the groups of the Chamonix Aiguilles and the groups of the Grandes Jorasses and the Talèfre, will appear very shortly.

VOL. XXXIX.—NO. CCXXXIV.

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The full series is as follows :

- Vol. I. *Le Massif entre l'Arc et l'Isère* (new edition).
Part I. N. of Col de la Vanoise, 27 fr. 50 post free.
Part II. S. of Col de la Vanoise, 22 fr. 50 post free.
- Vol. II. *La frontière entre la Seigne et le Thabor*, 22 fr. 50 post free.
- Vol. III. *Les Massifs entre la Savoie et le Dauphiné*, 24 fr. 50 post free.
- Vol. IV. *Les Massifs de Beaufortin et Les Bauges*, 27 fr. 50 post free.
- Vol. V. *Les Massifs entre le Lac d'Annecy et le Léman* (to appear in 1927).
- Vol. VI. *Le Massif du M. Blanc*.
Parts I. & II. as above.

The volume of Commandant Gaillard's '*Les Alpes du Dauphiné*,' Part II., covering the Massifs of the Meije and Ecrins, is announced for 1927 and can be subscribed for later.

These guides have full sets of skeleton maps and many route-marked sketches, so that the French Alps are now very well off for guidebooks.

Commandant Gaillard will issue early in 1927 a new coloured map of the M. Blanc group, scale 1 : 50,000, with all the most recent nomenclature.

THE JOURNAL OF DE SAUSSURE covering his sojourn at Chamonix in July and August 1787, with an introduction and many notes on little known details by Commandant Gaillard and Mr. Henry F. Montagnier, and heliogravures, was published recently, with the authorisation of the family. It shows his preoccupations and hopes and finally his unmixed joy at the success.

Subscriptions can be sent direct to Commandant Gaillard, M.C., Barberaz, Savoie, France. Edition de Luxe, 4to, 150 fr., ordinary 4to, 60 fr., foreign postage, 5 fr.

SECRETS OF THE EDITOR'S BOX.—On January 1, 1927, this venerable relict, in a state of perfect preservation, was handed over to the present Editor by Mr. Yeld. It contains several interesting pamphlets and letters. Perhaps, however, the most valuable document of all is a script inscribed '*Alpine Journal Notes*.' It is by Mr. Coolidge on relinquishing the Editorship and is intended for the guidance of his successors. It consists of ten closely written sheets of foolscap, all of which merit the closest attention. The gem of the contents, however, is a list at the end, entitled 'Con-

tributors who require tender handling.' There follow the names of nine mountaineers, mostly of the heroic age, all of whom, alas, save one, have now left us. In the fullness of time, the next Editor duly handed over his care of the JOURNAL together with the Editorial Box. He had added one name to the illustrious Nine and this name is labelled 'For VERY tender handling.' It is that of his famous predecessor himself!

OXFORD UNIVERSITY MOUNTAINEERING CLUB (Summer, 1926).—Busk (the Hon. Secretary) with Lloyd of the Cambridge Club and Heinrich and Simon Burgener arrived at Grindelwald on July 20. For the next three weeks continuous bad weather was experienced, but the Wetterhorn and Mönch were climbed and the Fletschhorn, Laquinhorn, Egginergrat and Nadelhorn as well.

During part of this period the combined Oxford and Climbers' Club Meet had been in progress at Fionnay. Here too the weather was unpromising, but much was accomplished by the more resolute members of the party. Among the more important peaks climbed were the Grand Combin (second ascent of the season). Ruinette, Combin de Corbassière, Dent des Rosses, Petit Combin and Pointe d'Otemma. The Meet then began to split up. One party followed the High Level Route to Zermatt, doing on the way the Mont Collon and Dent Blanche (first ascent of the season). Much of the climbing was guideless.

Part of the Meet migrated to Chamonix, where they picked up the Hon. Secretary. During the wonderful weather of August much was accomplished. The Nonne was traversed guideless and the traverse of the Grands Charmoz and the ascent of the Blaitière done with Armand Charlet. An attempt was made on Mont Blanc from the Torino Club hut, which failed owing to the illness of one member of the party, however the Mont Maudit was reached. The Drus (first ascent of the season) and the Grépon were both traversed, guided. Some scrambling was done on the Aiguilles Rouges and on the Petits Charmoz.

Another party of two proceeded from Fionnay to Tirol, picking up the President (A. J. Haselfoot) on the way. They traversed the main chain of the Tirolese Alps from the Brenner to the Glockner. *En route* they climbed the Olperer, Mösele, Schönbichlerhorn, Mörchner, Schwarzenstein, Zsigmondyspitze, Richterspitze, Gross Venediger and Gross Glockner. The party found the huts of the D. & Oe. A.V. equipped with undreamt of luxury, and were received with the utmost cordiality by German and Austrian climbers.

The party now split, and two members proceeded to the Dolomites. They climbed the Zwölferkofel on the first day and returned to Sexten, where Waterston was picked up. They then went to Cortina and worked westwards, climbing on the way the Croda da Lago, Cinque Torri, Tofana, Marmolata, Fünffingerspitze and

Langkofel by the S.W. ridge. The Meet ended with an unsuccessful attempt on the Grohmannspitze, defeated by rain and lack of time.

All the climbing done in Tirol and the Dolomites was guideless.

CAMBRIDGE UNIVERSITY MOUNTAINEERING CLUB (Summer, 1926).—A Meet was held from July 24 to August 5, at the Refuge des Evettes, above Bonneval-sur-Arc in the Central Graians. The Club has been there once before, in L. A. Ellwood's Presidency, and indeed it is almost an ideal centre for this type of 'communal' guideless climbing, as the expeditions to be made from the Refuge are mostly neither long nor very difficult. Twelve members attended, assembling at Les Evettes on the 24th, some coming direct from England, while one party arrived after a week in the Vanoise, in the course of which they had secured the Aiguilles de Polset, de la Vanoise and [*? Pointe*] de la Glière. In five days most of the Evettes peaks had been climbed, the President's party traversing the Pointe de Bonneval and the Ciamarella, and climbing one of the Mulinet peaks: the Treasurer's party traversed the Pic Regaud, the Pointe de Chalanson, and the Picco Tonini, and climbed the Albaron, while other ropes were also successful on the Pic Regaud and the Albaron. Then, with several people leaving for home, we were able to redivide into two parties of four. Wager took his rope over a series of cols to the Victor Emmanuel, and climbed the Grand Paradis and the Becca di Monciair, while Longland's party crossed to the Col de la Vanoise, climbed the Grande Casse and the Aiguille de la Vanoise, and then went on to the Val d'Isère, from where on August 4 they traversed the Aiguilles Rousses in a snowstorm to the new hut below the Col du Carro. Two hours after they arrived Wager's party came in too, after a very long day's march in bad weather from the Victor Emmanuel. Next day, the weather being still unsettled, we all went down the valley, and a very enjoyable Meet broke at Modane. The weather had been fairly good, and the unusual quantity of snow had not much affected climbing conditions.

After the Meet, one party went up to the Saint Michel-de-Maurienne valley to the Commandraut huts, on the east side of the Aiguilles d'Arves, and then climbed the Central Aiguille, while on the same day a second party walked from Saint Jean-de-Maurienne and attacked the Southern peak from the Rieu Blanc Châlets on the West; both arrived at their respective summits almost simultaneously, and caught glimpses of each other through the mist. Afterwards the first party finished up by walking through the Bauges district, and the other party went to Dauphiné, where, in the course of a fortnight, the Grande Ruine and the Montagne des Agneaux were traversed, and Les Bans and the Tête de la Gandolière climbed. Other Cambridge parties were in Switzerland, and quite a lot was done in the Chamonix and Zermatt districts.

There is a valuable monograph, in G. H. M. *Annuaire*, 1927, pp. 7-37, on LES PÉRIADES, *i.e.* from Mt. Mallet to the Aiguille du Tacul. Every tooth and depression on this long arête appear to be classified and measured. A great number of 'peaklets' are also named, mostly after famous Chamonix professionals. The first recorded ascents and variations are described at great length and detail. The writers, MM. Bruhl, Bernard and d'Aubigné state, quite frankly, that doubtless many of these points had been scaled previously but not 'recorded.' Mr. G. W. Young appears to have been one of the principal culprits ('On High Hills,' p. 253), but it must be remembered that some of these 'summits' barely emerge from the névé of the Glacier du Mont Mallet.

An interesting article on the CORNO STELLA also appears in the G. H. M. *Annuaire*, 1927, together with one on the routes up the S. peak of the PUNTA DELL' ARGENTERA from the Argentera glen. Both articles are by M. Jean Vernet, a great authority on the Maritime Alps and one of the members of the superb expedition up Les Ecrins from the Glacier Noir ('A.J.' 38, 304-7).

The G. H. M. *Annuaire*, 1927, also reports a thrilling attempt, August 3-5, on the AIGUILLE DES GRANDS CHARMOZ by the N.E. or Montenvers face. Caught in a storm, with only one surviving axe and with absolutely no food for the last 24 hours, the party were more than lucky to escape with their lives.

We understand that *no* attempt was made on the N. face of the GRANDES JORASSES during 1926, the last serious one being by an Italian party in 1923.

Two successful ascents of the extremely difficult DENT DU CAÏMAN (first ascent, July 20, 1905, by M. Emile Fontaine with Jean Ravanel and L. Tournier) are recorded last summer. No party had reached the summit since the first ascent. The route taken in the case of both parties was, of course, *over* the Dent du Crocodile; 4-5½ hours were the 'times' of the parties for the comparatively short bit between the Crocodile and Caïman summits.¹ See *Die Alpen*, 1927, pp. 74-7 with illustrations, and G. H. M. *Annuaire*, 1927, pp. 92-4, with a striking photograph, p. 124.

An attempt on the S. arête of the AIGUILLE NOIRE DE PÉTÉRET was made by Herren W. Welzenbach and E. Allwein on July 24, 1926. They, however, only attained the 3rd tower on the ridge. This tower is cut off from the 4th tower of the Aiguille by a great

¹ The Fontaine party took 3¾ hrs., and a total expedition of 19 hrs. 20 mins. from and back to the Montenvers.

gap some 300 ft. or more in depth. The descent is considered very problematical even with many 'rappels' and the further ascent even more so. The difficulties throughout are extreme. Another attempt by an Italian party, Signori G. Albertini, S. Matteoda and P. Zanetti, August 3-6, 1926, on the same arête is chronicled. This party also turned back at the 3rd tower (3420 m., *aneroid*). The weather was bad on both occasions, and the Italians found 4 inches of snow on the Fauteuil des Allemands on their return. It may be noted that the first tower on the arête or PICCO GAMBA (? 3050 m.) was climbed on July 26, 1913, by the late Dr. Preuss and Count Ugo di Vallepiana; 8 hrs. were expended in a climb of (?) 750 m. and the difficulties were extreme. The two above-mentioned parties, of course, passed *over* the Picco Gamba in their attempts on the Aiguille Noire, which in view of the weather, the time spent on the arête and the terrain, appear to have been of the most desperate nature.

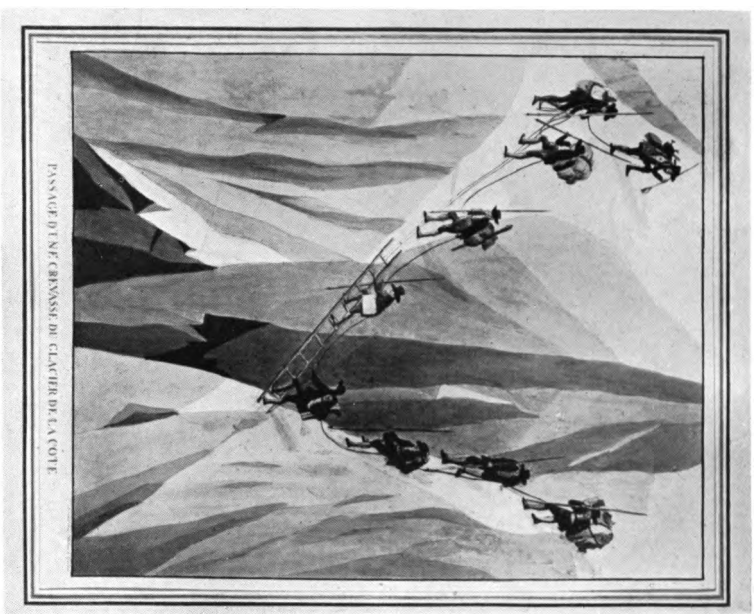
As related in 'A.J.' 38, 275, MONT BLANC was climbed by the Pétéret arête by Signori Albertini, Matteoda, and Zanetti, on August 15-18 (!), 1926. The weather was, from the first, very doubtful and they were much delayed as far as Point 4341 m. where, on the morning of August 17, they were caught in the same storm which so nearly proved disastrous to the de Lépiney-Bregeault-Migot party on the Brouillard arête. The Italian party passed a dreadful day, lightning striking the rocks all around them, and it was only on the 18th that the summit of Mont Blanc was attained.

Mont Blanc was climbed by the Brouillard arête, a day or two later, by Signori Barisone, Balestreri and Piantanida. One bivouac was made *en route*.

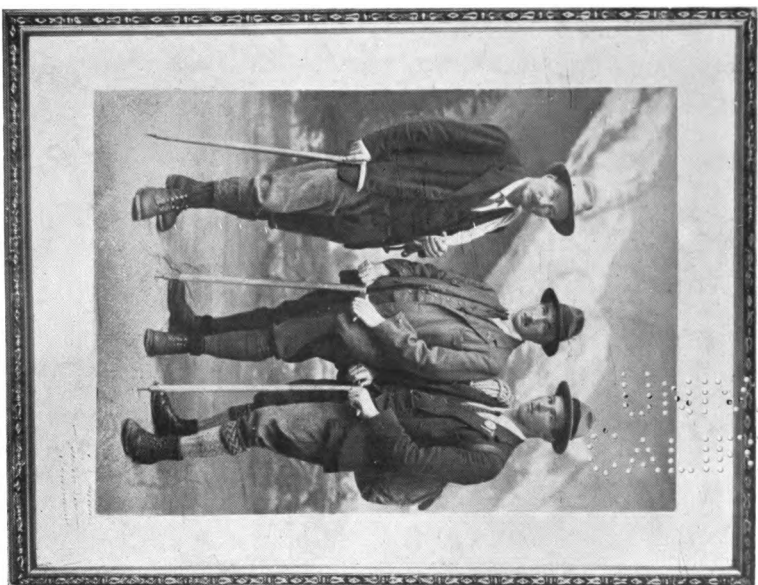
On September 1, 1926, Signori Albertini and Matteoda climbed the AIGUILLE DE GRÉPON from the Mer de Glace and reached the summit via the 'Knubel' crack. [The first 'guideless' ascent of the Knubel crack was by the Signori G. and A. Polvara and V. Ponti in 1924.] On the descent by the original 'Mummery' line of ascent, the 'Grand Gendarme' was turned, on the Mer de Glace slope, without any extraneous aid, first by a descent of some 40 ft., next a difficult traverse followed by a still harder reascent, by means of a crack, to the *Râteau de Chèvre*.

On the Courmayeur side, the DÔME DE ROCHFORT was climbed for the first time by its S. face by Signori G. and A. Polvara, August 1925. The PUNTA CASTELNUOVO, or highest tooth, of the Dames Anglaises has been climbed three times since the first ascent in 1907; viz. in 1922, by Signori G. Polvara, V. Ponti and A. Rossi from the gap between l'Isolée and the Punta Casati (the most northerly of the 'three fantastic sisters'²), this being the first ascent from the gap to the Punta Casati, the start having been made from the Fresnay side. In 1925 the Punta Castelnovo was climbed by

² Punta Casati, Castelnovo, and Jolanda.



Old Print from Collection of R. W. Lloyd.



*Joseph Pollinger.
R. W. Lloyd.
Adolph Pollinger.*

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Signori Albertini, Matteoda and Zanetti from the Brenva side, and in 1926 the ascent was repeated by Signori Gallo and Derege.

In 1925 the AIGUILLE BLANCHE DE PÉTÉRET was climbed from the Brenva side by Signori Bergera and Ghizetti, the descent on to the Fresnay being made approximately by the 'Jones-Croux' route. (All these 'Mont Blanc' notes kindly communicated by Count Aldo Bonacossa.)

These expeditions clearly show that the G. H. M. does not possess a monopoly in the Mont Blanc Group; but where are 'les jeunes Britanniques'?

The MITTLERE WETTERSPITZE, height given as 2750 m. = 9002 ft. (? 2450 m.), in the Bavarian Alps, was climbed for the first time by its N. face, the 'Wetterwand,' by Herren W. Welzenbach and J. Dreher on August 22, 1926. The height of the wall is stated to be 950 m. It was scaled in 6 hrs.; the difficulties are great and the rocks often treacherous ('C.E.A.Z.' xlix., p. 16).

The accommodation provided by the BRITANNIA CLUB HUT above Saas Fee is stated to have been frequently overtaxed during the last summer. On numerous occasions, 20 persons at least, were unable to lie down *inside*!

A good new hotel, Grand Hôtel du Val Ferret, has been erected at LA FOULY in the Swiss Val Ferret. The Châlet du Val Ferret also provides accommodation.

The ridge from the PIZZO CAMEROZZO (*Bernina*, W. Wing) to the N. summit (*Punta Bertani*) of Monte Scione was followed throughout, September 18, 1926, by Signori V. Bramani and M. Castiglione. It is a partially new route, very interesting, and being at a low elevation (9000 ft. or less), is suitable for doubtful weather. (*Le Prealpi*, January 1927).

Dr. Dukietz, the botanist, of Upsala University, Sweden, who is studying the alpine flora of New Zealand, declares that some of the lichens he has found there were known previously only in Arctic regions. New Zealand, he declares, is one of the most important countries in the world from the point of view of botanists. From *The Times*, February 1, 1927.

MR. ALLSTON BURR represented the Alpine Club at the Jubilee Dinner of the Appalachian Mountain Club held at Boston, U.S.A., on February 6, 1926.

THE jubilee of the *Centre Excursionista de Catalunya*, whose headquarters are at Barcelona, was celebrated on November 26, 1926. The Alpine Club wishes this, the senior mountain club of Spain, every success and prosperity.

THE twenty-fifth anniversary of the foundation of the *Nederlandsche Alpen-Vereeniging* was celebrated on March 19 at The Hague. Lt.-Colonel E. L. Strutt represented the Alpine Club, and conveyed the cordial good wishes of its President and members.

With reference to a note in 'A.J.' 36, 418, on INNS AND HUTS IN THE EASTERN GRAIANS, the 'Grivola' at Cogne is *not* as there stated, but the new 'Bellevue' is excellent and is well away from the high road where day (and night) is made hideous, as everywhere in Italy, by the open exhausts of cars and lorries. The Herbetet Hut is locked and the key must be obtained from the head keeper at Cogne. It provides sleeping (bunk) accommodation for *two* only. The Vittorio Sella Club hut, formerly the King's extensive shooting-box in the Val di Lauson and the nearest starting-point for the Grivola, was completely looted early last summer, but is now doubtless restored. The keepers throughout the region are most hospitable. Bouquetins and chamois swarm. With all shooting stopped, there appears little doubt that disease will break out. Feeding already seems to be very short.

SIGNOR COMMENDATORE BOBBA, Hon. Mem. A.C., is asking for subscriptions to erect a monument at Courmayeur to the memory of the late JOSEPH PETIGAX. The name of this great mountaineer is inseparably linked with H.R.H. the Duke of the Abruzzi's great expeditions to Alaska, Ruwenzori, the Himalaya and the North Pole. Subscriptions may be sent to the CONSORZIO GUIDE E PORTATORI DELLE ALPI OCCIDENTALI, C.A.I., via Monte di Pietà, 28, Turin.

THE new C.A.I. hut at about a height of 2320 m. on the S. side of the Drei Zinnen, called RIFUGIO PRINCIPE UMBERTO is well spoken of, and is suitable for a stay of several days. The caretaker is the well-known guide, Sepp Krautgasser, of Innichen (San Candido).

THE *Bulletin* of the Section de Genève, S.A.C., announces a lamentable ski-ing disaster to several young novices of the GRAND ST. BERNARD MONASTERY, on November 7 last. The monks were practising at the time in view of their dangerous and humane winter duties. Two of the party were rescued unhurt, but the other three, although equally quickly disinterred by the dogs, were already dead. The use of these splendid St. Bernard dogs, on the utility of which under modern conditions doubt in some quarters had been whispered, is thus nobly vindicated.

THE death is reported of DR. THOMAS THOMAS (1861-1926) of Paris, in an unfortunate automobile accident near Chamonix last autumn. The deceased, under the leadership of the late Auguste Blanc and his brother Pierre, became remarkable for some very

difficult and enterprising climbs in all parts of the Alps. Among these may especially be noted the first ascent of the Blümlisalphorn by the S. face, a notable variation to the S.E. arête of the Finsteraarhorn, an interesting and rarely possible route from the S. arête of the Dent Blanche to the Col du Grand Cornier, a route up the N. face of the Aiguille du Plan, etc. Dr. Thomas was always a most courageous climber.

A RELIC OF MONT BLANC. The ice-axe of Dr. J. B. Bean, who perished with ten others in the terrible disaster³ of September 5-7, 1870, has been found at the foot of the Glacier des Bossons. The axe, which was broken, was plainly marked with Dr. Bean's name. It had taken 57 years to descend the 2900 m. difference of level. It will be recollected that on Dr. Bean's body, which was one of the five recovered at the time, was found a diary, recording in touching and tragic words what must have been the last hours of the party. From *La Montagne*, 1927, pp. 60-1.

WE regret to announce the death at Chamonix of the guide FRÉDÉRIC PAYOT (1839-1927). Less well known than his brothers, Michel and Alphonse, he was nevertheless one of the best professionals of his time. He endeared himself to all mountaineers by his conduct during the search for the bodies of the victims of the Matterhorn⁴ tragedy of 1865.

La Montagne is asking for subscriptions to erect a monument over PIERRE GASPARD's grave at St. Christophe-en-Oisans. He was, of course, the first conqueror of the Meije.

A CLUB hut, to be named the 'E. T. COMPTON HÜTTE,' is being built by the *Kärntner Oberland* and *Austria* sections of the D. & G.A.V. The hut is on the Reisskofel (2369 m. = 7770 ft.), not far from Villach, Carinthia. It is built in memory of the well-known British painter and mountaineer, E. T. Compton (1849-1921), who was one of the greatest authorities on the Eastern Alps. The hut will be available this summer, but will not be officially inaugurated until 1928, when it is hoped that Great Britain will be represented.

A portrait of Mr. Compton and a sympathetically written article by Irene von Schellander will be found in the *Kärntner Kalender*, 1927.

The modern French and Italian craze for naming all points or prominent objects on ridges is sometimes carried to grotesque lengths. In 'R. M.' 1927, there is an admirable photograph of the BREITHORN (Pennines) as a frontispiece and equally excellent

³ See *Le Mont Blanc*, C. Durier, pp. 384-93; *A.J.* 5, 188-90, 193-7.

⁴ *Scrambles*, 2nd edition, p. 402.

ones facing pp. 32 and 33. On pp. 21–3 will be found an account of an ascent of the mountain by the E. arête. Both in the text and in the illustrations, the second point on that arête (4148 m., *S. map*, or 4154 m., *I. map*), W. of the Schwarzthor is called 'Gemelli'; further, in the text, this point 4148 m. is called *Gemello Centrale*. Nothing less resembling a pair of 'Gemelli' than this point can well be conceived. But this is not the worst; Castor and Pollux, immediately to the E., are named ZWILLINGE on the earliest editions of the Dufour, and the name is repeated in large type on the latest Siegfried map. When a point is named the nominator incurs certain responsibilities besides the hope that the name will prove acceptable and be adopted eventually by the official surveyors. Can anyone seriously expect that the Siegfried map—and who would use any other—will start a fresh pair of Twins within 2 kilometres of the former? And, moreover, not 12 kilometres further to the W., almost on the same ridge, are the Jumeaux de Valtournanche; thus *three* separate sets of Twins all within short range and view of the Théodule! We are not aware when, where, or how this misbegotten nomenclature arose, but the sooner these Breithorn points sink into nameless oblivion the better.

Der Bergsteiger (1927, No. 11) reports a 'new route' on the MÖNCH! An Austrian party, August 9, 1924, descended the E. and S.E. arêtes for some distance and then took to the latter's S.E. slope. This is, of course, a mere variation to the ordinary route and is frequently taken when the conditions are good—as they were on this occasion.

DÔME DE NEIGE DES ECRINS.—The 1911 route of Messrs. Young, Jones and Todhunter, with the guides Knubel, Brocherel and Croux,⁵ was repeated last summer, according to the *Revue Alpine*, by a French party. They describe the rocks of the 'obvious snow couloir' as being very rotten and the danger of stonefall great. The couloir is misnamed 'le couloir Jung' throughout the narrative. If this deplorable form of nomenclature is to exist, it would be as well if the nominators were to study previously their Alpine literature and revise their phonetic spelling.

AIGUILLE DE GRÉPON: *Pointe Balfour*.—This tooth, as is well known, was climbed on July 19, 1881, by Messrs. Francis and Gerald Balfour with the guides J. Petrus and P. Knubel.⁶ The climb was accomplished during an attempt on the main summit. The *Pointe Balfour* was subsequently attained, under similar circumstances to the above (August 25, 1885), by Monsieur H. Dunod with his guides.⁷ Later again (August 1, 1890), Messrs. Wicks, Carr and

⁵ *A.J.* 25, 736; 26, 251.

⁶ *A.J.* 10, 397–400.

⁷ *C.A.F. Annuaire*, 1885, p. 95.



DOUGLAS HADOW
(1846-1865.)

A reminiscence of the Matterhorn disaster of July 14, 1865.
(from the collection of Paul Montandon).



PETER TAUGWELDER, Junior
(about 1865).



CAV. GUIDO REY.



M. PAUL MONTANDON.
TWO GREAT MOUNTAINEERS.

Sir G. Morse attained the point, also when attempting the main summit. The statement made in 'A.J.' **38**, 265, rests, consequently, on no foundation whatever. It is a remarkable fact that even the third and fourth ascents of insignificant boulders continue to be recorded. This fashion, if justifiable for 'Saxon Switzerland' or the Lakes, is hardly so for the Alps.

Mr. Geoffrey Winthrop Young has been elected an Honorary Member of the G.H.M.

MR. IAN HEPBURN, aged seventeen, son of Dr. Malcolm M. Hepburn, made with his father and a guide the ascent of the Aiguille de la Za by the N. Col de Bertol and the traverse of the Petite Dent de Veisivi from the Col de Zarmine—August 1926.

M. PAUL MONTANDON, the distinguished Swiss mountaineer whose portrait appears in this number, has over 40 'first ascents' to his credit. We wish him as many more. He was one of the first Swiss to dispense systematically with guides.

COL DU LION.—In Mr. Oliver's 'The Col du Lion' in 'A.J.' **36**, 372, I interpolated a passage of the col by MM. Spoerry and Simon based on *Le Guide des Alpes Valaisannes*, ii. 255, but on comparing the climbers' own report in 'S.A.C.J.' xliii., I find that they only *looked down* the Swiss slope of the fateful Couloir du Lion after a traverse of the Matterhorn!

I also credited the late Mr. Wicks with a passage of the col. This was based on an incomplete recollection of an old conversation. Dr. Wilson confirms that Wicks did set out with this intention.

Wicks's short note is in 'A.J.' **10**, 405. His guides were Ambrose Supersax and Theodor Andenmatten. They started from Stockje on August 7, 1881, but after cutting up an ice-wall in the Couloir du Lion, exposed to falling stones, they took to the rocks on the left proper side of the couloir—i.e. Tête du Lion side—and finally struck the main arête about 100 yards W. of the tête. Mr. Wicks very properly calls his expedition an ascent of the Tête du Lion from the N.

My apologies are due to Mr. Oliver.—J. P. F.

M. PIERRE DALLOZ, the well-known mountaineer and authority on the mountains of the Dauphiné, has been appointed 'Directeur du Syndicat d'Initiative de Grenoble et du Dauphiné,' with headquarters at Grenoble. This appointment is a great advantage to mountaineers, and we feel sure that M. Dalloz will be found a willing and very capable adviser to any of our members passing through Grenoble—indeed he writes that the door of his office 'will be open *d deux battants* for any member of the A.C. who calls on him,' and that he will be much pleased to answer any inquiries.

The C.A.F. has built a new Club hut, REFUGE DE CHAMBEYRON, situated at a height of 2640 m. above the Lac Premier and easily accessible from Fouillouse (St. Paul d'Ubaye). The hut will much facilitate the ascents of the Aiguille and Brec de Chambeyron. From *La Montagne*, 1927, p. 103.

AIGUILLES DU DIABLE.—M. E. R. Blanchet writes: "A.J." 38, 309, speaks of a 60 m. chimney on the [upper part of] *Aiguille Médiane* (4097 m., *Vallot*) This should be reduced to a 45–50 m. chimney. August 26, 1926.—M. J. Chaubert and myself with Alfred Bozon succeeded in climbing the W. face of the *Pointe Carmen* [4109 m., *Vallot*; No. 2 of the Aiguilles du Diable]. Armand Charlet, having attained the summit by the "de Lépiney" route (N. face), threw down two ropes to the first mentioned. By these means they were able to climb the long practically vertical, almost holdless, and in one part overhanging, chimney which is the key to the ascent. A 40 m. rope "en rappel" is essential for the descent. This route is shorter, less glazed and altogether better than the "de Lépiney" one for the descent. As a means of ascent it is, of course, impossible without a rope, and even then requires an extraordinary and sustained effort.

'From the gap between *l'Isolée* [4114 m., *Vallot*] to the foot of the great chimney in the W. face, there are no serious difficulties.'

SATTELHORN (3745 m. = 12,287 ft.).—'We ascended by a large snow couloir, descending to the S. of the Sattellücke. As it was icy we climbed very rotten rocks on the S. side till the couloir narrowed, then crossed on to the N. side on to more rotten rocks; after climbing some difficult slabs where the rocks were sound, we reached the snowy part of the S.W. arête not far below the summit. On the descent we followed scree slopes on the N. slope of the S.W. arête till close to the Sattellücke—we were, however, far too much on the Lötschenthal side; accordingly, a series of traverses leading easily down to the Sattellücke, were only attained by a very awkward traverse over rotten rocks. The time of 55 mins., from the Sattellücke to the Sattelhorn, given in the "Climbers' Guide" appears very fast.'

GISIGHORN (3182 m. = 10,440 ft.).—'The point marked 3182 m. (S. map) is not the highest point, this being a point midway between point 3182 m. and the Gisigpass. The description in the "Climbers' Guide" (Bernese Oberland, i. part 2, p. 152) appeared to us at the time to apply to the ascent of point 3182 m., and not to the higher summit. Having reached point 3182 m. in 1½ hrs. from the foot of the peak, 40 mins. strenuous exertion on the narrow ridge were required before attaining the summit.'

HONSTOCK (3175 m. = 10,417 ft.).—'Route 1 (and also 2b) provides interesting climbing on the S.E. arête, while the direct ascent from the S. up the central buttress ("Climbers' Guide," route 2,

p. 158) is comparatively easy—rather in contravention of the “Climbers’ Guide.” [See ‘A.J.’ 17, 596–7.]

‘Start in the case of the Sattelhorn was from the Ober Aletsch Club hut; from Belalp in the other two cases. September 2, 4, and 6, 1926, Messrs. R. G. Smith, J. W. and H. Booth.’

H. BOOTH.

PIZZI PALÜ (3912 m. = 12,835 ft.), traverse to PIZ BERNINA (4055 m. = 13,304 ft.). This very unusual combination was carried out on August 31, 1925, by Mr. H. Booth with Theodor Biner and Johann Gross. The very fast times were as follows:—Diavolezza, dep. 01.30; Piz Palü (Central Summit), 05.45; Piz Bernina, 08.15–09.00; foot of ‘Labyrinth,’ 10.45–11.15; Morteratsch Restaurant, 12.45. The original intention was to descend by the N. arête, but this appeared to be impracticable.—H. BOOTH.

The new and excellent COAZ CLUB HUT has taken the place of the old Mortel hut in the Rosegthal, the latter having now been pulled down. The Coaz hut is the property of the Sektion ‘Rhaetia’ of the S.A.C., of which section the late Herr J. Coaz was the founder, president, and also honorary member. The hut affords accommodation for 30–35 persons. In conformity with the decree of the S.A.C. that the object of these huts being to provide shelter for serious mountaineers only, any suggestion of *new* Club huts being run as ‘Inns’ has been strictly vetoed. The Coaz hut will, of course, be inspected periodically.

THE SILS LAKE PROJECT.—We understand that the scheme has, unhappily, not yet been shelved. The Cantonal authorities are stated to be unfavourable to it, as are all the Upper Engadine hotel-keepers. The Sektion ‘Bernina,’ S.A.C., with other societies, is conducting a vigorous struggle to prevent the threatened desecration of this the most beautiful part of the Upper Engadine. The veteran Christian Klucker has actually protested before the Federal Council, Berne, on the subject in what, we have heard, was a great oration. There are now hopes that the lake will be declared a ‘national sanctuary’ and that the communes owning the lake (Sils and Stampa, Bregaglia) will be compensated for any loss arising from the abandonment of the scheme.

We understand that the project was to provide power for *Italy*, that the sum of 50,000,000 (Swiss) francs was promised, and that the level of the lake would be reduced by no less than 40 ft. Moreover, the entire Bregaglia slope of the Maloja Pass is bound to suffer from the picturesque point of view from the presence of pipes leading down from the sluices at the head of the lake.

The Hôtel Waldhaus, Sils Maria, has been partially destroyed by fire. It will be rebuilt before the coming summer season.

A permanent 'shelter hut' is to be placed, as soon as possible, on the COLLE KENNEDY (between the point 3286 m., I. map, *Punta Kennedy*, and the N. arête, proper, of Monte Disgrazia). This may⁸ facilitate ascents of Monte Disgrazia from Val Malenco by the original 'Pilkington' route, 'A.J.' 11, 245-53. The dimensions of these 'shelter huts' are described in 'A.J.' 38, 136.

Owing to the frequent overcrowding of the MARINELLI Inn (which has virtually taken the place of the ancient C.A.I. Club hut), Bernina Group, a new inn is to be opened this summer on the BOCCHETTA delle FORBICI, 2662 m. = 8734 ft., situated on the way from Chiesa to the Marinelli and about 1½ hr. distant from the latter. The Marinelli is the best situated centre for expeditions in the Bernina Group. Other new or restored C.A.I. Club huts, all run as inns, are to be found on the PASSO DI CORNAROSSA, c. 2850 m., and on the Alpe AIRALE, 2078 m. Thus, *three* Club huts now exist on the S. slopes of Monte Disgrazia, and Chiesa becomes, as stated by Melchior Anderegg in 1862 ('A.J.' 1, 5), the best starting-point for that mountain.

INNS IN THE WESTERN GRAIANS.—A small but excellent hotel has been opened at Champagny-le-Bas. The Hôtel de la Grande Sassièrè at Tignes is said to be comfortable and the prices reasonable.

We understand that the late Mr. Coolidge's valuable library has been bought by a Swiss syndicate for public and private libraries in Switzerland.

The Erzherzog Johann's Hütte on the GROSS GLOCKNER is to be rebuilt, and subscriptions are being asked for. These should be sent to Herr J. A. Weiss, Beatrixgasse 32, Vienna, iii.

The well-known guides Enrico Gaspari of Cortina and Théophile (son of the late Louis) Theytaz of Zinal visited Great Britain this spring. They are reported to be climbing, respectively, in Arran and Skye and the Lake District. Alphonse (son of Pierre) Blanc is in Wales.

MM. de Ségogne and Chevalier visited the Welsh hills at Easter, while MM. Cordier and Morin (all of the G.H.M. of the C.A.F.) were in the Lakes. M. Cordier, unfortunately, met with a severe accident while climbing: he is reported to be doing well.

S.A.C. HUTS.—The number of visitors to the various Club huts during 1926 is given as 46,076, as against 43,855 in 1926. The Boval

⁸ The trouble will be to reach this hut through the séracs of the Ventina Glacier during the *afternoon*. A more suitable spot would have been above the Ventina Châlets.

Hut, with 3145 visitors, as usual, holds the palm for popularity, while the Balmhorn Hut, with 65, has displaced the Sciora as the least frequented. In the 97 huts, the percentage of S.A.C. members to all visitors works out as 36·5. From *Die Alpen*.

I learn with much regret that Mr. W. H. White, the manager of Messrs. Spottiswoode's Printing Works at Colchester, passed away on February 11. I had many opportunities, during my 18 years' connexion with the ALPINE JOURNAL, of appreciating Mr. White's sterling character, his keen sense of humour and his versatile interests. I was much indebted to him for ever willing assistance.

Mr. L. G. Jenkinson, who, for some years, had acted as his deputy, has been appointed his successor.

J. P. F.

I desire fully to associate myself with Captain Farrar's remarks.

E. L. S.

A COPY of the first volume of *Bourrit's Nouvelle Description des Glacieres*, 1787, has been placed in the A.C. library. This volume has the bookplate of C. Davy; and a leaf has been inserted at the end upon which the following appears in, apparently, Bourrit's handwriting:

'De Salenche à chide [⁹ Chedde] une heure $\frac{1}{2}$. Là vous irez à l'extremité du lac de chede ⁹ pour y admirer l'aspect du Sixte. Arrivé dans la vallée de Chamouni à une lieuë en deça du Bourg du Prieuré a l'endroit nommé Monquart là vous demanderé pour vous conduire au Bosson l'un des fils Simon—le Vieux—

'le lendemain vour irez au Montanvert et sur la mer de glace le soir a l'arveron.

'A Monquart le pere Simon, ou son fils le rond—

'à Chamouni Jaques Balmat Marie Coutet × × Michel Paccard
× ou son neveu le Grand Jorasse.'

At the foot of the sheet is the following:

'N.B.—Directions given to me by Mon^r. Bourrit on } July 1788.
my leaving Geneva for Chamouni.—C. D. }

Mr. Montagnier writes to Captain Farrar: 'C. Davy was evidently the man who translated into English Bourrit's little 1773 book. There is a copy of the translation in the A.C.L. in which you will find the list of subscribers. The latter is worth examining as it contains the names of a lot of celebrated people. It is interesting to find that the author and the translator actually met in Geneva in 1788.

'Copies of Bourrit's book with MS. instructions in his hand-

⁹ See frontispiece to the present number.

writing at the end are pretty common. I found one a few years ago. For nearly 50 years old Bourrit was a recognised authority on the Chamonix valley, and every summer dozens of English visitors used to call on him at his home in Geneva to ask his advice. If they bought a copy of his book on the glaciers of Savoy he almost invariably wrote at the end a page or two of instructions for their benefit.

A full account of the life of Charles Davy, 1722–1797, who translated Bourrit's book jointly with his brother Frederick, will be found in the 'Dict. of Nat. Biography.' The real name of Le Grand Jorasse or Joras was Lombard Meunier (see 'Annals of Mt. Blanc,' p. 40).

WINTER ASCENTS.—We learn that the Central (3970 m.) and Eastern (3911 m.) summits of the MEIJE were climbed on February 13 of this year by MM. P. Dalloz, A. Arnaud and F. Scheibli. Leaving the Refuge de l'Aigle at 09.00, they attained the Central summit at 12.30, thence descending to the Tabuchet Glacier, the reascent to the Eastern summit was commenced at 16.00, and the top attained at 18.00. Profiting by the brilliant moonlight, the Refuge was regained at 20.30. The party are reported to have experienced a violent wind on the mountains and considerable danger from 'slab' avalanches in the descent from the Refuge to La Grave. M. Dalloz, it will be remembered, made the first winter ascent of the Western summit (3987 m.) on March 16–17, 1926, ski being worn as far as the foot of the Promontoire, which has caused the expedition to have been described as 'a ski ascent of the Meije'!

GRANDE CASSE (3861 m. = 12,668 ft.), December 31, 1926.—Under severe but good conditions, a French party consisting of six persons, three amateurs and three guides, attained this summit by the ordinary or Glacier des Grands Couloirs route. Less than 4½ hrs. were required from the Refuge Félix Faure to the summit. Ski were *not* employed. This is stated to be only the second winter ascent of the mountain, the first having taken place in 1899. From *La Montagne*, 1927, p. 116.

TOUR OF PIZ BERNINA.—March 6–7, 1926 : Miss Margaret Ward (aged 21) with the guides Platz and Hauser of Pontresina : Left Roseg Restaurant, 08.30, up Roseg Glacier, and over Sella Pass ; down Upper Scerscen Glacier to Marinelli Club hut, 14.45 (6½ hours). Weather fine at first, then snowstorm from midway up Roseg Glacier to hut. *March 7* : Marinelli Hut, dep. 07.30 ; over Lower Fellaria Glacier, up Sasso Rosso 'Pass,' thence down Palü Glacier to Alp Grüm, arriving foot of glacier 12.45, and Alp Grüm (Bernina Railway) 13.50 (6 hours 20 mins.). Fine weather, favourable snow conditions. The 'times' are exceedingly fast, and show what young British mountaineers are capable of.

HIMALAYAN NOTES.

UNDER KANGCHENJUNGA.

THE *Geographical Journal* for April last contains a spirited account by Captain Boustead of a repetition of Mr. Tombazi's climb from the Talung valley to the 19,300-ft. gap at the eastern base of Kangchenjunga and at the head of the Zemu glacier. (See 'A.J.' 38, 150.) My party at first named it the Cloud Gap from the frequent scarves of mist that rushed through it before spreading themselves across the great cliffs of Kangchenjunga.

Captain Boustead's impression of the difficulties of the ascent from the Tongshyong glacier to the Zemu Gap altogether coincides with Mr. Tombazi's experiences. The climb is obviously formidable at all times for laden coolies, and probably dangerous in bad weather. The best that can be hoped is that, when better known, it may serve as a supplemental access to the upper Zemu and the Green Lake camping grounds for parties who have sent part of their goods round by Lachen. It is to be hoped that before long a track will be cut through the dense jungle between that village and the foot of the Zemu glacier—which Mr. Odell recently found impassable to a weak force of coolies.

Like Mr. Tombazi, Captain Boustead did not cross the ridge and descend on to the Zemu. The access to the pass on that side is up a gently-sloping snow corridor, interrupted by but few crevasses, which is well shown in the photograph by Dr. Kellas ('A.J.' 26, 114). So easy is the going that Dr. Kellas, who was prevented by mists from reconnoitring the southern slope, was able to walk up the last 1100 ft. in an hour.

Dr. Kellas in the course of his comprehensive explorations climbed also to the broad saddle between Simvu and Siniolchum. A party of mountaineers camped at the Green Lake might do well to follow his suggestion, cross the Simvu Saddle, descend to the Talung valley, and return by the Zemu Gap. Dr. Kellas considered the upper portion of the glacier descent from the Simvu Saddle practicable; but there may be serious difficulties in the gorges between the two passes. Graphic descriptions of the obstacles they present may be found in Sir Claude White's volume 'Sikkim and Bhutan' and in the narratives of Messrs. Shawcross and Raeburn, 'A.J.' 22, 591, and 34, 33. The expedition would afford the best opportunity for reconnoitring Siniolchum, which from this quarter did not appear to Dr. Kellas to be wholly impossible. Simvu may turn out relatively easy. As this massive mountain stands directly between Siniolchum and the Zemu Gap, I venture to doubt Captain Boustead's identification of a peak he saw from the gap as Siniolchum!

Captain Boustead gives the height of the Guicha La as 18,000 ft. in place of 16,430 ft. This is probably a slip.

Captain Boustead acknowledges the valuable help he received

from Mr. Shebbeare of the Indian Forest Department, a member of the 1924 Mt. Everest Expedition. Mr. Shebbeare, we learn, 'has established a sort of depôt in his house at Darjeeling of Whymper tents, cooking pots, Alpine rope and cookers.' May we hope that we shall soon hear of the creation of a Mountain Club at Calcutta, and of some steps being taken to open up Jongri and the Zemu region as Riffl Alps for holiday adventurers!

Both Mr. Tombazi's and Captain Boustead's trips to the snows were made in early summer, before the monsoon. Their unfavourable reports of the weather encountered suggest to me that the relative drawbacks and advantages of early summer and autumn for mountaineering in Sikhim cannot yet be held to have been conclusively determined. It might be worth while for some pains-taking enquirer to go through the recent records of travel in the eastern Himalaya with this question in view. The meteorological records of Darjeeling would not be conclusive, since the clouds that burst on the foothills do not always reach the snows or get beyond the southern flanks of Kangchenjunga. I cannot forget the month of almost perfect weather that followed the great storm of September 24 in 1899. I am therefore disposed to believe that the periods of settled weather in the autumn are longer than in the period preceding the monsoon. By mid-October it may be too cold to climb the highest peaks, but up to 20,000 ft. we found the temperatures very endurable, and for week after week the peaks were, up to midday, practically cloudless.

D. W. FRESHFIELD.

CAUCASIAN NOTES.

TRAVEL IN THE CAUCASUS.

In January last Professor G. Nikoladze of the University of Tiflis was good enough to call at Lowther Lodge with the object of giving the Geographical Society and myself some particulars of the recent (January 1924) formation of a Geographical Society at Tiflis and of its activities during the past three years. It would appear from his account that the Central Caucasus is now open to travellers, if provided with the necessary passports from the Central Government at Moscow. At any rate the Georgian parties he led through the mountains met apparently with no hindrances.

In 1924 and again in 1926 Kasbek was ascended. Several other mountain districts were visited with scientific objects. In 1925 a more extended tour was undertaken under Professor Nikoladze's guidance by a party consisting of seventeen men and ten women, all members of the Society. The expedition started on August 4 from Kislovodsk. Passing through Uruspieh they first attacked Elbruz. Despite broken weather, fourteen men and five women attained the E. summit, the first ascent since 1913.

The party next crossed by the Dongusorun Pass into Suanetia and visited most of its glaciers and villages. They found the district under the control of a Suanetian Soviet and had no difficulty with the inhabitants. There had been some fighting after the revolution, but the villagers had since been disarmed. From Kal a portion of the party proceeded directly to Kutais by the Latpar Pass, while the remainder descended the gorge of the Ingur and then, following its tributary the Nenskra and crossing the Khita Pass, entered the valley of the Seken river in Abkhazia. This valley, formerly deserted, they found thickly populated by settlers from Suanetia. The tourists finished their arduous journey of 700 kilometres on foot at Sukhum-Kaleh on the coast of the Black Sea. They took numerous photographs, and in the Nenskra valley were lucky in acquiring two gold coins, one of Alexander the Great and the other of his lieutenant Lysimachus, King of Thrace.

D. W. FRESHFIELD.

NEW ZEALAND NOTES.

LETTER from Mr. Arthur P. Harper to the Editor, January 20, 1927.

' . . . Porter and Kurz should be having some good weather this season, but I have heard nothing from them since they left for the Alps. I have not had time to go S. so far this year, but may do so at Easter.

' At present, I am having a great fight on the guides' behalf, to get them better conditions, both as to pay and general treatment. Luckily our Prime Minister is interested in this, and on his return from England I may be able to get some results. If I don't, there will be no good guides at the Hermitage next year. Porter and Kurz are going to assist after their season ends; the former fully supports my scheme and admits that the outlook is very bad so far as the future guiding is concerned.

' Last January I went to the Franz Joseph and took my 16-year-old daughter over Graham's Saddle to the Hermitage, doing a peak on the way; three days, of which the last was 22½ hours (not bad for a 16-year-old), and both going strong! We returned *via* the Copland Pass, which I crossed first, and alone in the 1894-5 season. The Prime Minister asked for a full report, and most of my suggestions are being carried out, including the erection of a hut on the Chancellor Ridge of the Fox glacier, a hut which I advocated in my book "Pioneer Work"¹ as long ago as 1895. One has to wait

¹ The Government have issued another edition of their booklet on the Alps, which I have amended and brought up to date. I am sending you a copy.

a long time, but persistence often succeeds, and our hut will be up this year I hope. It will be one of the most useful huts for high work.

'A week or so ago one of the guides, Williams, and a Dr. Bradshaw tried Mount Elie de Beaumont (10,200 ft.), one of our highest peaks, and the latter slipped and pulled Williams out of his steps. They however "somehow" saved themselves and got down. It was a bit of luck.

'On their return along the Tasman glacier, they found a leg at the foot of the Hochstetter Icefall, the remains of one of the poor fellows who were killed high up on the Linda glacier when King lost his life with his two guides some 12 years ago. They were overwhelmed by a huge ice avalanche off Mt. Dampier. There is no possibility of identifying the leg, which is torn in parts, although the lower portion and foot is unharmed.

'Owing to the guide troubles, there is not the high climbing at the Hermitage that there was when the Grahams were there, who, as you know probably, are as good guides as can be found anywhere; but I am glad to say that some of the youngsters of the present generation are gradually pushing into minor districts and learning the game on some of our lower, but still very interesting, peaks and smaller ice-fields. We have many such districts at the heads of our various rivers, and they take their camps and do a little pioneer work, not real first exploration, but at any rate first ascents. It is cheaper than the Hermitage, which is so expensive that many of us find our purses too short to afford it.

'These more or less out-of-the-way expeditions will, however, breed enthusiasts who later will try our greater peaks, without guides. There is more likelihood of high climbing developing from the western side, where the Grahams have set up a hostel, and do all they can to encourage climbing, and when my Fox glacier hut materialises I forecast some high work from the West.

'For myself, I fear real high work is out of the question. In my youth exploring had to be done and I did it. I am now over 60, and though good for some fairly strenuous work, it would be folly to go in for hard climbing on high peaks. I can get a lot of pleasure going over the old ground which Douglas and I explored, and doing so under modern conditions. That, and the keeping alive of our N.Z.A.C., will be my work now.

(Signed) 'ARTHUR P. HARPER.'

LETTER to Captain Farrar, dated the Hermitage, January 13, 1927.

'... On the 5th and 6th of January we [Messrs. H. E. L. Porter and Marcel Kurz] transferred ourselves in gloomy weather to the Haast hut, and struck a perfectly glorious day on the 7th. Leaving the hut at 01.50, we reached our highest point of December in an hour's less time and got to the summit of the Silberhorn at 06.35

without any setbacks. The conditions were vastly improved since December, good snow, in which crampons bit beautifully, replacing the nondescript ice, and very few steps being required. From the Silberhorn, the Tasman ridge—real knife-edge ice most of it—looks amazingly formidable. Neither Kurz nor I know anything in the Alps to compare with it. Not far above the depression between Silberhorn and Mt. Tasman it was broken by a schrund which did not seem feasible near the ridge itself. So we wandered along the lip on the E. side till we came to a point where a very delicate bit of icemanship on the part of Kurz gave us victory. Above that the ridge was too steep and acute-angled even for my “Eckenstein” crampons, and we kept below the slight cornice on the E. slope for some 200 ft. or so, till the ridge eased off a bit. We got to the top [of Mt. Tasman] at 08.50—7 hrs. in all. After 15 mins. halt we proceeded down the virgin N. ridge—not nearly so fierce an affair, although very interesting all the way—to the col. S. of Mt. Lendenfeld, and thence to the Grand Plateau. The whole of our descent to the Plateau was new ground: anyhow, this was the first, I think, traverse of the mountain and the fourth ascent. We were back at the hut at 15.20, extremely satisfied and with one more of my ambitions fulfilled. Kurz was splendid, but had the bad luck to twist a tendon in his knee in a rather adventurous jump over a big schrund—nothing serious. Without crampons we should have had to cut some thousands of steps and descend by the same way, and, as we were neither of us very fit, we should undoubtedly have failed. . . . Three days later we made the second ascent of the S. peak of Haidinger, along the ridge which is shown in my last article.² . . . No one had been on it since FitzGerald, Zurbriggen and Clarke on February 8, 1895. . . . We had rather a long day. It is a splendid ridge walk, rather like the Rochefort ridge in parts. On the summit we found a bottle left by FitzGerald with a paper inside: most of the writing had faded and was illegible, but the date was still clearly visible.³ We waited in the hut for two more days for Mt. Cook, but a Nor’Wester developed and drove us down to-day. . . .

(Signed) ‘H. E. L. PORTER.’

LETTER to Captain Farrar, dated the Hermitage, January 30, 1927.

‘Our second bout at the Hermitage has now come to an end, and despite much bad weather has been, I think I may say, a magnificent success. We have achieved, in one of the worst seasons on record, since Jan. 4, (1) The first traverse of Mt. Tasman (11,500 ft.); (2) The second ascent of S. Peak of Haidinger (10,150 ft.); (3) A failure

² *A.J.* 36, facing 290.

³ Cf. *Climbs in the New Zealand Alps*, by E. A. FitzGerald, pp. 165–79; *A.J.* 17, 471.

on Elie de Beaumont (1000 ft. from top); (4) Ascent of Aiguilles Rouges (9700 ft.); (5) Ascent of Malte Brun (10,420 ft.); (6) Third ascent of David's Dôme (10,450 ft.); (7) Fourth traverse of the great ice-ridge of Mt. Cook.

'For the last two expeditions we have been blessed with a spell of fine weather lasting six days, on three of which there was little enough wind to make climbing on these great ridges a safe and wonderful pursuit. David's Dôme is an interesting mountain and a marvellous view-point. We climbed it from a tent-bivouac half-way up the Hooker glacier on top of the Noeline rocks, via Harper's Saddle and the W. face. We had hoped to go on along the ridge to Dampier (the third highest of the lot) and only once climbed (from the other side), but we had made too late a start.

'Next day we rested, and on Friday, the 28th, set out at 02.30 from the bivouac for the Cook traverse. Crampons on at once, and Kurz had them on all day nearly, while my Eckensteins didn't come off till we reached the summit rocks on the descent. We had 6500 ft. to ascend to the ridge between the Low and Central Peaks, and we followed more or less Route 1 on Newton's 8th picture⁴ till near the top, when we swung out to the left, the rocks being all swathed in icicles. Ridge at 09.05 some 250 yds. north of the Low Peak, which we didn't bother about as we couldn't traverse it, and time is even more valuable to the guideless here than in Switzerland. The ice-ridge is pure joy, not so difficult as that of Tasman, being neither so steep, nor so acute. It was pretty well corniched, and below the cornice where our path lay was a most curious ice-formation: myriads of truncated ice-mushrooms the whole way along in which our spikes bit well. Up the last 800 ft. to the ridge, we had struck real hard ice and had much cutting to do. Once on the ridge we never cut another step all day! Central Peak 09.40, High Peak, a mile or so beyond, 10.30. Quite comfortable for a meal, and my pipe was lit with the third match, so the wind was strictly moderate. We descended the Linda Route without trouble and with very little danger. The ice-cap, which took us 4½ hrs. to ascend 3 years ago with mere boots, was polished off in 30 minutes of descent! The summit rocks, which had foiled a party the week before, were still very messy with snow, but they are so easy that it didn't matter. The Linda Glacier was in good order. We had to watch our chance crossing its head below the two evil couloirs, which were active as usual, and the Silberhorn corner at the entrance to the Grand Plateau was very broken and difficult. We got to the Haast hut at 17.30. Fifteen hours for the traverse, of which 2½ were halts. This knocks several hours off previous times. It is the fourth traverse (by Route A of my article)⁵ and of course the first amateur traverse. Kurz is delighted with the whole business. It has just come exactly right as the culmination of our time at the Hermitage:

⁴ *A.J.* 29, facing 13.

⁵ *A.J.* 36, 281-99.

if Friday or Saturday hadn't been fine, he wouldn't have got Mt. Cook at all, as we are now off to Waiho to join Hugh Chambers in a bivouac on the Fox glacier for ten days or so.

'Peter Graham brought Miss Beattie of the Ladies' A.C. over Graham's Saddle to the Malte Brun hut while I was there, and was detained there two days by a Nor'wester. A most interesting and charming man.

'From the Fox Glacier—bivouac on Pioneer Ridge—there should be some good things to do : (1) Traverse of Haast and Lendenfeld in a day ; (2) Traverse of Douglas Peak and Glacier Peak in a day ; (3) Most important climb left in the Southern Alps—ascend of west ridge of Mt. Tasman from the col between Tasman and Torres. We don't yet know if this is possible, but hope to know before we are many days older. . . .'

(Signed) 'H. E. L. PORTER.'

LETTER to Captain Farrar, dated Glacier Hotel, Waiho Gorge, February 14, 1927.

'Our climbing season is now finished, and has ended with another week of almost incredible good fortune. The last event of the season was arranged long ago with Hugh Chambers, and was to be a bivouac high up the Fox Glacier—a repetition of Newton and Teichelmann's wonderful camp in 1907 with Alec Graham. From the Hermitage base we had been round Mt. Tasman on the S.E. and N., traversed it, and photographed it on every possible occasion. If we had any luck on the Fox, we might complete the job by climbing Lendenfeld and Torres and so getting more photos from the N., and new ones from the W.

'The W. coast climate is even wetter than that on the E. of the divide. The sweat and labour of getting up a bivouac from 500 ft. to 7000 ft. up a highly broken glacier, and through scrub and bush would be too heart-breaking if no result was achieved.

'Last Monday we started off, and by Wednesday midday had selected a new site under Pioneer Ridge. For the last few hours we had been staggering across and through a maze of long crevasses with nearly 60 lb. swags, as our two porters had had to leave us to secure their own retreat. That afternoon Kurz and I went off and climbed a virgin peak (Le Receveur, about 9300 ft.), the continuation of the W. ridge of Tasman beyond Torres (10,376 ft.), which is the first peak on the ridge. Torres is one of the most inaccessible of the eighteen tenthousanders, and we were most anxious to make the second ascent of it. From Le Receveur we spotted a most promising route for another day.

'Next day dawned badly, but improved, and at 08.30 we were off to Pioneer Pass to try and traverse Haast and Lendenfeld (both over 10,000 ft.). Haast had been once ascended, but never traversed, and Lendenfeld had been conquered three times. We climbed easy rocks

from Pioneer Pass to the Great Haast ridge, running down to Glacier Dôme and the Haast hut, and finally the Tasman Glacier, nearly 7000 ft. below. It had been my ambition to climb the whole ridge some day, but I am wiser now. The small portion left for us to deal with on this occasion took nearly 2 hours (and we are not a slow party!). Mostly a sharp, narrow snow-arête such as are so common on the bigger mountains here—like the Rochefort ridge only longer and much sharper and steeper-sided. At one point the ridge rose for 50 ft. at an angle, at which none of us had ever seen snow lie elsewhere. It turned to ice halfway up, and I had a difficult job to do cutting across to some rocks away on the right, and so round the corner. Lendenfeld was an easy crampon walk, but the descent from the col between it and Tasman was distinctly bad for some 300 ft. Kurz and I in three expeditions had now traversed the whole main divide from the Silberhorn to Haidinger in one season—a unique record.

‘The floor of our bivouac was angular débris as big as one’s hand, and the amount of sleep obtained was negligible. However, one’s muscles got some rest, and by this time Kurz and I were almost tireless in body, though I was getting distinctly fatigued mentally (a fact evidenced by my taking two exposures on the same negative more than once on this trip).

‘Next day we conquered Torres by the route we had spotted. It is a fine mountain and the views from it completed the perfectly wonderful series of photos which Kurz and I have got this season—beyond compare better than those of my two other seasons. This year I have a Sybil camera with a magnificent lens, and it has been well worth its cost.

‘Next day we broke camp, having nearly eaten ourselves out, the day being also far too windy to be on the main divide; so we had to leave Douglas Peak, our other ambition, unclimbed. We got right down the Fox, and next day back to Waiho, still dry and unraind on. Having let us get home, the rain then began in earnest! Perfectly astonishing fortune. We had added three tenthousanders and a virgin peak of over 9000 ft. to our victories in $2\frac{1}{2}$ days’ climbing.

‘Our total of ten tenthousanders and four other good peaks and three great passes in seven weeks will stand untouched until a similar party manages to do the same or better.

‘I remain deeply indebted to you for suggesting Kurz to me. Neither of us has lost a day’s climbing through illness or fatigue, or damage. Since our return to the Hermitage on January 4 we could not have dreamed of a finer series of expeditions successfully carried through, with only one defeat entirely due to bad weather.

‘We start home on March 10, and I get back to London on the *Ormonde* about the end of April. I look forward to showing you my photos, and I should love to have a place in the “A.J.” to devote to the glorious Mt. Tasman, worthily illustrated from N., S., E., and W.

(Signed) ‘H. E. L. PORTER.’

AMERICAN NOTES.

CAPTAIN and Mrs. A. H. MacCarthy are keeping their ranch in British Columbia for their summer home, and have bought Fair Hill Farm in Colorado for their winter residence.

Captain MacCarthy writes on February 26 to Captain Farrar :

' . . . It appears that we have picked rather a rough state (Colorado) in which to live, for within its boundary lines it has 46, 14,000 ft. peaks, 257, 13,000 ft., 329, 12,000 ft. and 209, 11,000 ft., or 841 ranging from 11,000 ft. to 14,420 ft. above sea level. I wonder . . . if it would be a foolishly ambitious job to climb the list ? . . . '

After Captain MacCarthy's performances in the Alps during the summer of 1926, we do not think that these 841 peaks should keep him busy for more than $8\frac{1}{4}$ seasons !

Captain A. H. MacCarthy and Mr. H. R. C. Carr have been elected Honorary Members of the Appalachian Mountain Club.

Dr. J. Monroe Thorington will be at Chamonix and Zermatt during the coming summer.

AMERICAN MEMBERS OF THE ALPINE CLUB.

Minutes of Meeting of October 23, 1926.

The Association held its Autumn Dinner at the Harvard Club in New York on Saturday, October 23, 1926.

The following members attended : Allston Burr, J. W. A. Hickson, Noel E. Odell, Allen Carpe, J. E. Fisher, H. S. Hall, jun., Howard Palmer, Joseph Wood, jun., and H. B. de Villiers-Schwab ; also these guests : Wm. S. Ladd, B. F. Seaver, and J. M. Thorington.

At the commencement of dinner the Chairman, Mr. Burr, mentioned the loss of our fellow member Leroy Jeffers. There being no business to conduct, the speakers were called upon immediately after dinner.

Mr. Odell spoke at length on 'Mt. Everest,' and then answered many questions put to him, especially concerning the final and tragic phase of the attack. His slides were splendid.

Dr. Hickson followed with an account of his 'First Ascent of Mt. Fryatt' with Howard Palmer and guide, and also told of their conquest of Mt. Lapensee.

The evening concluded with a first showing of Mr. Carpe's film of his 'Attempt on Mt. Fairweather,' made with Dr. Ladd and Andy Taylor the past summer. They were up to his usual high standard of excellence and graphically illustrated the difficulties encountered.

The next dinner is to be held in Montreal next May.

ALPINE ACCIDENTS.

THE winter season of 1926-27 has been disastrous in loss of life and in injury. The newspapers publish almost daily accounts of fresh tragedies, many exaggerated, some even imaginary. Nevertheless, the total is very startling. The number of winter visitors to the Alps has increased by thousands, most of whom ski, while perhaps one per cent. have the faintest knowledge of snow conditions or mountaineering. This ignorance, unfortunately, applies principally to our countrymen. The Swiss, the Austrians, the French, the Italians and the Germans have, by their environment, learnt something of the perils of the Alps. British expert ski-runners mostly spend their time in sports known as 'slaloms,' while the non-expert slide about on slopes, trodden to adamant hardness, at the back of hotels. Yet both kinds often start for an expedition immediately after or during a fall of fresh snow. 'It will be perfect to-morrow for ski,' was the remark made to us by a well-known ski-runner, when after 60 hours of storm and continuous fall of snow he proposed to set out on a big expedition. He and his two companions returned safely, principally because, having no map, they were unable to leave the main valley! They saw many avalanches and they had an 'interesting' day, but the conditions were 'disappointing.' Many more accidents may occur before these young skiers learn the rudiments of winter mountaineering. The pioneers waited for days, even weeks, before the conditions appeared safe; these later-day 'experts' wait hours, sometimes not even that. The British and other Ski Clubs issue sensible advice and warnings, but the toll of accidents appears to qualify considerably the statement by a great ski authority that:—

'... the ski-runner ... may claim with justice to be a specialist in one important branch of mountaineering, for he has contributed far more than the foot climber to the science

of snow craft. Snow-craft was, indeed, a rudimentary science until ski-runners began to climb. Guides, like *Christian Almer*,¹ who were credited by their employers with possessing an infallible knowledge of snow conditions, made the most elementary blunders, blunders that a ski-runner who had crossed no pass higher than the Scheidegg would instinctively avoid. . . . Even the most casual of ski-runners interested only in tests and races soon picks up more snow-craft than is within the knowledge of the average mountaineer.'²

It is hard to estimate the baneful influence caused by remarks such as these, but, *si monumentum requiris, circumspice*; the ski accidents of this winter bear irrefutable witness, for few were due to any cause except the neglect of the first principles of snow-craft and elementary mountaineering.

We publish a short account of one of the more disastrous of these accidents; of a later catastrophe which occurred in the Samnaun Valley, near the Munschuns, 2700 m., we have been unable to obtain authentic particulars. These accidents, as well as the Rocher de Naye avalanche, all involved great loss of life.

An avalanche which buried ten persons, seven of one party and three of another, occurred in the Pazieltal on January 1, 1927. Only two were dug out alive. One party consisted of two brothers Lehr with a professional from Zürs, of whom Dr. F. H. Lehr was rescued; and the other of seven British, only Miss Woodward surviving. These two parties, and at least two other parties, or from seventeen to nineteen persons in all, had left Zürs, 5600 ft., to climb the VALLUGA, 2811 m., 9222 ft. Two members of the British party, who happened not to be taking part in this particular expedition, recounted some of the circumstances in a letter to *The Times* of January 17, 1927. The Editor of the 'A.J.' is indebted to Mr. Oswald Cox, who was similarly situated, for evidence collected from actual eye-witnesses.

The parties involved were at, or just above, the spot-level marked 2360, shown between the slopes of the Trittkopf and the terminal moraine of the Pazielferner on the D. & C.E.A.V. 1:25,000 map. They were following a track which zig-zagged upwards in three tacks, the German party being on the top tack and the British on the lowest one, or about 15 minutes behind. This track traversed the lower slope of

¹ The italics are our own.

² *British Ski Year Book*, 1926, p. 613.

the Trittkopf, 2722 m., 8930 ft. Above this slope steep rock, with snow-filled gullies, extends to the summit of that mountain. The slope has a northerly aspect, and had been in complete shadow up to the time of the accident, 11.15 to 11.30 A.M. What is probably the most remarkable part of the whole affair is the fact that the three zigzags led up the débris of a smaller, but apparently not inconsiderable, avalanche which fell on the previous day.

On the morning of the accident the sky was clear. Thermometer readings at Zürs showed -5° C. at 9 P.M. on the 31st, zero at midnight, and -5° C. at 9 A.M. on the day of the accident; so it is possible that the snow was cooling down just before it occurred. The 31st was fine; but snow, estimated at from 10 to 18 in., fell at Zürs on the 30th. Drifting took place on the 31st and the 1st. Dr. Lehr estimates the avalanche field at 300 m. broad, 120 m. long, and in places 12 m. deep. Dr. Eitner, of Vienna, who was only just clear of the avalanche, estimates the general depth at 7 m.

The opinion of those on the spot seems to be that the avalanche started at a level of about 300 m. above the upper party. In any case the existence of avalanche débris of the previous day renders it improbable that the parties started the avalanche themselves. On the lower slope, where the parties were, the avalanche is described as an enormous snow slab, which developed into a 'ground' avalanche. Eye-witnesses scout the possibility of a cornice having collapsed in the first instance; stating that not only was no cornice seen, but also that there was no place where it could form. As against this Mr. F. S. Smythe, who has crossed the Valluga four times, and who correctly located the site of the accident in contradiction to English press reports, which indicated the steepish slope leading from the Pazielferner to the S.W. ridge of the Valluga, states that before now he has had to negotiate the steep and less easy terminal moraine, rather than risk passing under the Trittkopf cornice.

Miss Woodward owes her life to the fact that she fell in trying to run clear of the avalanche, with the result that the tip of one ski was exposed, and indicated her position. This was seen by Dr. Hermann Beck's party, who effected her rescue. It was stated in the press that two men lay in the snow to form a bed for her while she was being revived—a device worth noting. Dr. Lehr, who was dug out by Dr. Eitner and others, has given an account of his struggles to keep clear. In spite of his ski, which were undamaged, he managed to

keep near the surface by means of a swimming action with his arms. He then pushed a hole clear for his mouth, and indicated his position by shouting. He states that three persons had to dig for $\frac{3}{4}$ hour before he was entirely free, although according to Dr. Beck he was not completely buried.

To say definitely whether the Valluga was a prudent expedition on the day in point or not must be left to those who were on the spot; but, at first sight, of the various causes of this accident, the primary one appears to be that the parties set out for a serious ascent almost immediately after a heavy fall of fresh snow. Speaking generally, however, steepness renders the avalanche question a more serious one round about the Arlberg early in the winter than it is in the average Swiss ski-ing resort; and this opinion is substantiated by the fact that the reason given as to why the Heidelberg is the only hut on the N. side of the Silvretta which is *bewirtschaftet* before the middle of February, is that it is considered too dangerous to maintain a regular service of porters earlier than this. As against slab avalanches which skiers are liable to start themselves, the elementary precaution is for individuals to keep well apart—not 15 yds. apart (as is often considered sufficient), but 150 yds. if necessary. On the other hand, separation of individuals or of parties will not reduce, in the long run, the total number of persons caught by avalanches which start of their own accord. It will, however, have material effect upon the number killed, because systematic open order tends to increase the ratio of those available for rescue work to those buried in any given instance; and the effect of such open order should not be nullified by one party climbing immediately below another one, however far the two may be separated as regards actual distance or time.

Another factor which must not be lost sight of when climbing in winter, is that all parties wearing ski are unquestionably more likely to start an avalanche than those wearing raquettes or boots. If a party is actually caught in an avalanche, it is obvious that those wearing ski are practically helpless.

REVIEWS.

On High Hills. By Geoffrey Winthrop Young. Demy 8vo. Pp. 368. Methuen & Co., 1927. Price 18s. net.

IN this book Mr. Young has given us a record characteristic of his personality and worthy of his great reputation as a mountaineer and a lover of 'high hills.' The cruel fate of war which ended his Alpine career, but which could not, thanks to his ingenuity and endurance, put a final period to his ability to move among the hills and even on the rocks, has left him with a wealth of memories which was bound sooner or later to find expression.

Mr. Young has written poems and 'papers,' and is responsible for a notable book on 'Mountain Craft,' but the sum of his experience was yet to come, and now we have got it. The writing of such a book must have involved great and prolonged labour, but labour obviously mixed with the keen pleasure of vivid recall of his adventures, pleasant, arduous, dangerous, exciting, exhilarating, and sombre. No climber has had a more varied experience: none, probably, has an equivalent record of grand expeditions. 'Grand' is the word which was used by the late Mr. Coolidge (by no means an admirer of the school to which Mr. Young belongs), when speaking to the present writer, of the great ridge climbs which Mr. Young thought out, worked out and carried out; and 'grand' is the right word.

But to come to the book; the style is his own, and the text wanders among the three 'twisted strands' which he says in his preface or 'Foreword' (he seldom uses the obvious word if a better, or sometimes even if a worse one is available) are always present in a day upon the mountains—'the things we are doing, the things we are seeing, and the things we are feeling.' The narrative runs from one to another in an engaging, if sometimes a somewhat irritating, way. Seldom do we get a coherent record of the 'doing' for long at a time; for the 'urge' (as he might put it) of what is seen and what is felt continually crops up and demands immediate attention and treatment.

This is no guide-book, and even the most consecutive narrative of a great climb would seldom, unless in the matter of sticking closely to a skyline, enable a party to follow his route in detail. Picturesque writing is often improved by an element of fantasy or exaggeration, conscious or unconscious. There is little to suggest that either enter into these pages, but Mr. Young leaves nothing to chance; for the exact localities where exciting incidents occurred cannot be identified, and the memorable situation on the Täschhorn, where, amid snow squalls, the two marvellously held slips occurred,

could probably not be found again even by the climbers themselves. Had Mr. Whymper envisaged the possibilities of lively controversy which he was unconsciously preparing for himself, we should doubtless have lost one of the best climbing pictures in any Alpine book. If the gap on the Ecrins arête is not (or was not) as depicted—it ought to be. Yet Nemesis arrived. But no such tribulation can await Mr. Young: his traces, good or bad, are always adequately covered. The book is, as already stated, no guide-book, but a chronicle of experiences, thoughts, moods, and reveries linked upon and about the best chain of Alpine climbs that any individual has recorded.

Many of Mr. Young's 'days' were very long ones, and many of his expeditions could not have been done in a day but by very fast going. Of the pace at which he and his companions could go, under good conditions, there is plenty of evidence, and many of his great expeditions have long been a matter of history. Few, however, are aware of his attempt, frustrated by a 'cold-footed' guide, to traverse the skyline of the Gorner basin in a single day, from Nordend to the Théodule. This he records among his 'failures,' though he traversed all the Monte Rosa summits, and the Lyskamm, and reached the col between Castor and Pollux before (with all the afternoon in hand) the guide complained of a 'sprained wrist.' Some of his other 'failures' touched almost the same level.

The best chapters from a climber's point of view are those at the end of the volume, and they deal with the great ascents with which the author's name will ever be associated. The Jorasses, the terrible climb up the S. face of the Täschhorn, the Brouillard ridge (a magnificent feat and marvellous record of a single day's effort), the Mer de Glace face of the Grépon, and the ever memorable last climb but one up the splendidly castellated W. arête of the Gspaltenhorn. These chapters alone would make a good book. In them the text often flows smoothly in page after page of unbroken narrative, and the thoughts thrown in are always welcome and pertinent: and much the same may be said of many other descriptive passages in the book. But other portions, exemplified by the chapters entitled 'Moods and Shadows' and 'Suspense and Colour' are written from the opposite angle and make less easy reading. The latter deals primarily with 'feelings'; and the author's thoughts and theories are elaborated, and illustrated by references, often short, to segments of innumerable expeditions, so that the reader is jerked about the Alps in sharp zigzags which cover the four mountain groups to which Mr. Young has mainly confined his activities and which he knows forwards and backwards, sideways and upside-down—the great massifs of Dauphiné, Mont Blanc, the Pennines, and the Oberland.

To follow these illustrations intelligently needs detailed knowledge, and the author's avowal that the book is addressed more to 'those who are interested in mountaineering' and in 'our reasons for

mountaineering' than to 'the converted who climb,' seems somewhat belied : for, while those who know the topography of the Alps and the history of modern mountaineering will follow the text readily, the galaxy of peaks, glaciers, and valleys alluded to indiscriminately seem likely to confuse the uninitiated, while the frequent allusions to an almost equal number of guides and companions by Christian name—surname—nickname—abbreviation or initials must be bewildering to those who have not a pretty intimate acquaintance with the *personnel* of the school of guides and amateurs belonging to the era concerned. Possibly if the novice were to read the book straight through, a course which the author does not recommend and which he states that he could not himself adopt, the key to 'who's who' might be found, but perhaps not. When, however, opening the book at random, one knows which of the many Josefs of the Alps is 'Josef' and which of the many Hanses is 'Hans,' and so on, it is easy to allocate to the right individuals the generous appreciation bestowed upon the splendid guides and gifted companions with whom the author has had the good fortune to be associated. And to any reader the charming vignette depicting the winter life of the renowned St. Niklaus guides, recalling the genial relationship which one associates with the mediaeval guilds, is all the more alluring because the group is easily identified.

Turning from the matter to the methods of climbing described, we must all admit the skill, daring, enterprise, and endurance of which there is such abundant evidence. The high pitch of technical perfection to which the curious art of 'axe-climbing' on steep rocks has been brought by Josef Knubel and some of the Lochmatters deserves remark. They seem to have evolved a safe technique ; and a trick which many have used as an occasional resource and regarded as a bit risky would seem to have become, in the hands of these experts, a reasonably reliable procedure which opens up possibilities fairly frequently in otherwise impossible situations.

One note of criticism, with which Mr. Young would probably agree, may be safely made : the rope is discarded too much. In difficult and dangerous places it was, of course, always employed, and its need was sometimes shown. But slips and pitfalls are at least as frequent when they are least expected : some of the finest mountaineers have lost their lives where a rope would have saved them ; many have been saved where ropeless they would have perished ; and Mr. Young was himself lucky in a crevasse below the Ecrins. Most climbers can recall a momentary loss of balance, such as Mr. Young describes on the Rothhorn, recovered from without anyone else being aware of it ; but the balance has not always been re-established : and the most menacing crevasse mishap which has occurred in the reviewer's experience was concerned with an immense but quite concealed chasm, floored sixty feet down by a lake of iced water, wide enough to swallow a chalet, roofed (till the middle gave way) by a slightly convex pie-crust of snow,

and traversed by the much used track of the ordinary Théodule route.

The book is enlivened by twenty-four illustrations, two of them portraits, eighteen well-chosen and beautiful photographs from nine sources, and four monotyp reproductions of fine paintings by the late Mr. E. T. Compton, an artist unexcelled in the delineation of rock peaks. And there is a commendable index.

Will this book become one of the great classics of mountaineering literature? One of the dozen, say, out of the hundreds? The material is unexcelled and the author's literary gifts are obvious. The reviewer thinks that it stands a very good chance. Will Mr. Young's peculiar and very individual style enhance or diminish the chances? It seems impossible, without shirking, to avoid some allusion to the vast number of unusual words and phrases depicting phases of thought, feeling, atmosphere, motion, rock, snow, and ice which are one of the striking characteristics of the text. Take three short examples referring to atmospheric conditions—'dreen of hail'—'scuddles of sleet'—'rufous and stammel light.' Of these the first and second anyway are expressive; yet they do not compare with the beauty and clarity of Mr. Young's style at its best. 'That night it froze, starrily . . . and three o'clock discovered a clean darkness still pricked with stars.' This seems good enough to be 'a joy for ever': but the curiosities, though evidencing a very unusual gift, might be more effective if used more sparingly. Still, the reviewer has no quarrel with Mr. Young's style. The narrative is often thrilling, and sometimes even terrible; one comes across many happy thoughts very happily expressed; and there are patches of fine poetry both in verse and in prose; while many of the queer phrases and coined words, though seeming to imply that ordinary English is inadequate, do seem to taste better at the second gulp, a fairly reliable sign of good vintage. Our hope is that the book will be found among the twelve; perhaps high up among them.

But a good book, like a good picture, is worthy of a good setting, and a grumble at the publishers seems inevitable. Though the print is good, and the illustrations well reproduced, the book has a clumsy shape, like a 'text-book'; the paper is poor, the print, though good, is too crowded for pleasure-reading, and the margins are miserable, marring the appearance of the printed page, and sadly handicapping the illustrations. It is not a pleasant volume to look at inside or out, nor comfortable to handle in an easy-chair. Doubtless there were difficulties in the way; but two generously treated volumes would have solved the problem: or perhaps, with painful pruning, a single volume reduced to about three-quarters of the words, might have retained the essential qualities, and provided, on good paper and with decent margins, a pleasanter companion for leisured reading, 'to be dipped into as an occasional fireside distraction,' which is the author's avowed and modest aim.

Yet, in spite of these drawbacks, the reviewer can honestly end up by saying to the book, 'With all thy faults I love thee still.' At the request of the Editor the Club copy was sent to him by the Secretary 'for review.' He did not keep it long. Though it arrived at a time when there was but little leisure for such things, and though the bulk of the volume alarmed him, he promptly 'dipped into it,' and went on doing so till, long before either saturated or satisfied, he went to the book-shop and ordered a copy: and he will continue to 'dip in' off and on for the rest of his life. 'Our Mr. Young' has written a great book, and to the readers of these notes the writer would say 'Go to the book-shop.'

C. W.

Reliquiae A. D. Godley. Edited by C. R. L. Fletcher. 2 vols. Oxford University Press. 1926.

THESE volumes contain a large part of the extant literary work of a scholar and humorist well known to the Alpine Club, a lover of all mountains and hills and a strenuous climber, a patriot who served his country, whether England or Ireland, with head as well as with heart, and on occasion proved himself a man of action and resource. Not the whole; for, besides books of professional scholarship, we are reminded of four published volumes of verse and two of 'Echoes' from the *Oxford Magazine* containing much of his best writings down to 1912; and there remain also, accessible in Oxford, some five volumes of typescript, where no doubt more may be read than meets the eye here. We are indebted to the editor for his skilful handling of a mass of material, some of it, and not the least admirable part, fragmentary, and for the convenient classification under the several heads of interest. Still more grateful are we for the faithful *Memoir* of the man as he was. The editor is chary of adjectives, and does not use superlatives, so that it is a peculiar pleasure to read of Alfred Godley that 'he was one of the wisest men we ever knew, and by far the most even-tempered man we are ever likely to know'; and, later on, 'Though he had no illusions, and was always conscious of the losing fight, he had probably much greater happiness as he grew older.' Here we have the key to the resolute and melancholy features shown in the fine frontispiece, in which, perhaps, it is not fanciful to discern a man who 'could not bear to be without a dog,' and who 'shared with many wise persons a most intelligent and comprehensive affection for the whole race of cats.'

We do not reach 'Alpina' till we are well on in the second volume; but in the first is a paper 'On a Map and Walks,' to which we will return, only noting the wholesome proposition (with the contradictory of which the writer makes pleasant work later on) that 'it may be taken as axiomatic that no one who can ascend a hill will walk on the flat.' Then we have the names of Lliwedd and its congeners, rolled out as though dainty on the tongue. In 1917, a year of stress, and of retrospect, we are reminded how, in happier

days, the P.L.M. train would crawl up the heights of Jura, and how, on the other side, the emancipated toiler

Would climb the valley's unforgotten ways,
And taste the fragrance of a purer air,
And presently espy
Guarding the gate of some Valaisian pass,
The gleaming peak, the glacier seen afar,
Rising above the pinewoods . . .

A lovely touch, anticipated in 'Switzerland' (*Second Strings*, 1902) (of which favourite poem a part is exhibited in the facsimile of the rough copy attached to Vol. II., where those curious in the workings of a poet's mind may find problems to solve¹), and developed in the article contributed in 1916 to a Swiss journal.

With the exception of that article, all the papers included in 'Alpina' have appeared in this JOURNAL. They 'seem to the present editor almost the best of his prose writings,' and we cordially agree. Readers will form their own opinion as to which is their favourite. The first, read to the Club in 1907, contains a bit of autobiography for which the author apologizes. He tells us how he started for his first serious walk as a crassly ignorant amateur, taking to himself professionals and an alpenstock like 'the mast of some great ammiral,' the possession of an axe then implying some pretensions to be an expert (we are reminded of a highly controversial question of those days, 'A.J.' 4, 126-9), and choosing the Adler from Zermatt to Mattmark as a test, because Baedeker said it was 'wild and hazardous.'

'Looking back on the cold details of that expedition, I can find nothing in it that a properly constituted mind could call enjoyable; yet I know very well that I seemed to myself to have discovered an entirely new and unmixed pleasure, and to have merely wasted all the years which I had spent outside Switzerland. I am almost ashamed to say how little I have changed my mind since then.'

The second paper, 'Crambe repetita,' was read before the Alpine Club on April 13, 1915, when Godley was C.O. of a battalion of Oxford Volunteers, soon to become a county force. It is a glorification of passes, and in particular of the great passes about Zermatt, not only those over the Great Divide between Switzerland and Italy, but those from one lateral valley to another, all 'the noblest series of Alpine routes, not one of them that is not in the grand style, like Homer.' We do not expect 'descriptions,' but there are flashes which betray the seeing eye and the inward enjoyment.

¹ Why did two often-quoted lines run, as pencilled on the margin,
'Place me somewhere in the Valais, 'mid the mountains *east* of Binn
East of Binn and *west* of Savoy in a decent kind of inn'
(the italics are ours) ?

The Valcournera will show the sort of thing, coming as unexpectedly as did the passage of the col of that name to the travellers :

‘On that day, by some strange meteorological freak, the rain was not actually falling. Very fresh and green were the pastures of that most Arcadian valley, very beautiful the blue mountains of Cogne in the distance ; it was such a scene as the admirable Tschudi, with emotion severely abbreviated by the limitations of his printer, is in the habit of describing as *ID (idyllisch)*. And in the descent from the top of the pass to Prarayé there were occasional places where it was quite necessary to proceed with care. Altogether a delightful pass ; and if it had not been raining at Zermatt we should probably never have seen it.’

Godley’s own preference was for the Schwarzthor ; which, by a rare stroke of luck (only discovered afterwards) he crossed on the very day and month on which John Ball made his memorable passage sixty-eight years before, with his alpenstock and his umbrella, and Mathias ; and if we follow Godley’s account, with *Peaks, Passes and Glaciers* at hand, and Adams Reilly’s beautiful map, supplying the names of Alpine stations which man’s necessities have added, we know that we are treading, under reverent guidance, in the footsteps of the great and good. ‘There is nothing petty about the Schwarzthor.’

Very characteristic of the writer and of his friends are the obituary notices of Charles Cannan and Walter Paton Ker. In the latter a deep note is struck, but every line is simple truth. After speaking of the particular pleasure which W. P. K. found in the companionship of men and women much younger than himself, and they in his, he writes :

‘They and others will long remember the peculiar intensity of enthusiasm which possessed him when he was walking or climbing among the High Alps. It was not generally (as his friends will readily understand) expressed in many words, and sometimes not in words at all ; but it was there, burning in him like a fire, and somehow communicating itself to others. He was enjoying every moment. He idealized mountains ; nothing in the whole business of mountaineering but seemed in a manner to him to have a kind of divine sanction ; and the peasants who guided him ceased to be ordinary men, and became creatures divinely appointed to lead him into sacred places. Somehow in the Alps he seemed to be raised to a higher power. Merely to be on a climb or a high walk in noble scenery quickened his senses and his intellect. The Alps satisfied him, as great literature satisfied him. They brought out what was best in him ; and the best of W. P. Ker was pretty good.’

From the article contributed in 1916 to the *Bibliothèque Universelle et Revue Suisse*, and signed by A. D. Godley, A.C. ; Section Monte Rosa, S.A.C., we have already quoted for the exaltation with which an old climber mounted the Jura in happier days to the open gate into Switzerland. The writer claims that the Playground of

Europe is no land of regrets, even in evil days, but one consecrated by happy memories of life lived at its highest and of brave companionship. The paper is headed *Les Alpes et la Liberté*, the latter word one which Godley used in no vulgar sense, and which he justifies by quoting in full 'one of the noblest of Wordsworth's sonnets.' He ends with words of hope and cheer :

'Nous reviendrons, j'en ai confiance, dans votre pays—nous qui avons admiré ses institutions et les vertus de ses habitants—pour chercher le repos dans ses charmants séjours et dans l'air pur de ses hauts alpages ; alors, quand nous nous reporterons de la sombre vallée des dernières années de souci et d'épreuve aux brillants souvenirs du passé, donnez nous le droit de sentir que nous sommes venus nous reposer et nous consoler auprès d'amis qui ont réellement sympathisé avec nous dans ce gigantesque conflit.'

Returning to Vol. I., we find the paper, already mentioned, 'On a Map and Walks,' which is reprinted from the *Cornhill Magazine* of August 1918, pleasant reading, even for those who do not know the country round Oxford, including, in an ample sweep, the Chilterns, the Cotswolds, and the Berkshire Downs. Godley was a strenuous walker ; he carefully distinguishes 'a walk' (his own greatest recorded length is 33 miles), as from a mere 'turn or stroll,' so from 'a walking tour,' which implies at least one night away from home. Over and above his sense of the natural beauties of the several districts, he writes with enthusiasm, tempered by a sane care for the better housing of the rural population, of the picturesque old houses and villages. Thus of the Cotswolds :

'Nor are their beauties those of decay. Their houses are ancient, but of a hale old age. Cotswold oolite is a sturdy stone for the builder—not like the Headington stone which, by its mere friability, gives a false air of venerable antiquity to so many Oxford buildings which, after all, have only seen a couple of centuries. These Cotswold houses are for the most part much older than that, but outwardly they are none the worse for wear. And in form and colour they are often exquisite : every line and tint seems just right ; they have the happiest gift of looking somehow like a natural part of the country which surrounds them. Perhaps in a world of balanced good and evil it would be too much to expect that all these picturesque villages should satisfy all the ideal requirements of rural housing : yet there cannot be very much amiss, for they rear a sturdy race.'

And again :

'Beauty and material prosperity do not in England always go hand in hand. If the people are to be drawn back in some measure to the land—as one must earnestly hope that they may—villages must be regenerated ; there must be ampler and better housing : and much picturesque antiquity may perish in the process. . . .

'Well ! one cannot have everything.'

The portraits incidentally given of other Oxford walkers are too

good to avoid quotation. He mentions two men of widely different interests, often found in company. H. was an honoured scholar, whose works survive him. 'C. was by some twenty-five years the older man of the two. He lived in a College, but his life had been neither cloistered nor studious. He had served in a Militia battalion abroad during the Crimean War, and afterwards commanded it at home. He had travelled far, in the backwoods of Canada and in the remotest parts of Asia Minor.'

C.'s chief recreation was hunting, and the common objects of the country appealed to him chiefly as they reminded him of days with hounds, the uppermost motive in a walk being the carrying out of a preconceived plan, of which the noticeable objects were noted beforehand on an otherwise immaculate shirt-cuff, and 'afterwards transferred to a manuscript volume known as the Book of Jasher, which is happily still extant.'

'To walk with C. was like going by rail. You took a ticket, as it were, and thereafter had no option in the matter. You were then bound to a time-table, due, if return were actually by rail, to arrive at the station neither after the train nor yet before it, but simultaneously with its appearance; and if this exact coincidence involved a "double" of a mile or so at the end of a twenty-mile walk, why "doubling" was regarded as a part of the game, and a legitimate and calculable expedient; not running, *bien entendu*—to run would have been a confession of miscalculation and therefore absurd. Above all, the chosen route must be followed, without mutability or shadow of turning. If nature or art interposed obstacles, so much the worse for them. It is on record that C. and a friend of like temper, returning to Oxford by a route supposed to cross the Thames by a bridge, found themselves confronted, more probably in consequence of the error of a map than of a convulsion of nature, by the unbridged river running bank-high. It was possible indeed to make a *détour*; but no such *détour* was in the prearranged scheme. Accoutred as they were, they plunged in: and I have no doubt that C., at least, reached home if not absolutely dry yet not visibly moistened by his enterprise. He had at all times the most extraordinary faculty of keeping clean and tidy when others were merely disreputable. Rain ran off an impervious surface, and mud did not adhere to him; and I have known him return, after a long day of Oxfordshire clay or Berkshire chalk, as spick and span at all points as if (to suppose an entirely improbable contingency) he had been going to a tea-party. To be immaculate, in fact, was his habit, and undeniably habit was his master.'

C., Colonel Thomas M. Crowder, for many years the Bursar of Corpus, deserves a place in any record of travelling and mountaineering. He was the invariable companion of the Rev. H. F. Tozer (1829-1916), a member of the A.C. from 1877 till his death, a most accurate scholar and geographer, and a veracious traveller, no less precise in person and costume than his friend, but on a somewhat

smaller scale. Together they ranged far in Greece and Asia Minor ; together they climbed Mount Athos (6350 ft.) in 1861, and in the same year essayed Mount Olympus (9754 ft.), but were turned back by a storm when within an estimated 200 ft. of the summit of that elusive mass of peaks and ridges where the greater gods of old time had their several lodgings.¹ ('Researches in the Highlands of Turkey,' by Rev. H. F. Tozer, 2 vols., 1869. For Mount Olympus see 'A.J.,' vol. 36 and the present number.) In Vol. 8 is an account of Mount Taygetus, by F. F. Tuckett, the most ubiquitous of climbers, within his narrower world, who lived before Bryce ; for a description of the mountain, the writer quotes and endorses that given by Tozer in his 'Geography of Greece,' p. 43, from his own experience, doubtless shared with Crowder.

Of Godley's own travels in classical regions, his paper on Ithome, the capital of Messenia in later Greek history, from *Macmillan's Magazine* of November 1899, tells us something :

'Every student, of course, realises the enormous value of excavation ; but when he is away from museums and sees nothing but the havoc wrought by pick and spade, his gratitude is apt to be a little tempered. No doubt the thing is inevitable. Our modern passion for the naked fact will never be satisfied with hint and suggestion ; we must stand on the very stones of the street, we must bare the innermost recesses of the house, we must rifle the grave itself. Yet should we really gain (after such fashion we may suppose a sentimentalist to meditate) were Messene, like the Roman Forum or the Altis of Olympia, a naked ruin, a chaos of skeleton antiquities ? Certainly, it would be a sacrifice of pure natural beauty. Perhaps that is no great matter ; yet for many imagination finds it easier to people ancient sites with ancient life when they have been left to fulfil their peaceful destiny, unprofaned by an exposure which shows much that was never meant to be seen, or a restoration which by its necessary incompleteness is less suggestive than no restoration at all. Some excavation there must be, that imagination may have a solid basis ; but let it be done without wanton excess, sparingly. We are more directly, certainly more agreeably and pathetically, conscious of the vicissitudes of human life, when change has not been unduly diverted from its natural course ; we are more alive to the mortal things which touch the mind when we see but the grave, than if we could actually touch the bones, the crumbling corpse of the Past that lies beneath. It is the broken column and the green grass growing over it that speak, more eloquently than hand-books and museums, of the transience of Man and the permanence of Nature.'

He sighed as a sentimentalist but obeyed as a working scholar. Indeed, it is said that in later life Godley took a serious interest in

¹ See *A.J.* 36, 170-3, for a review by Godley of Kurz's *Le Mont Olympe*.

Greek archæology, and had been known to make himself happy over a Greek jar.

We must pass lightly, though our readers will lose much if they pass too lightly, over matters of academical interest. A large part of these volumes is concerned with the question of 'Compulsory Greek,' of which Godley was a staunch defender. There is much which is witty and eloquent, in verse and prose, mostly written in English, though in 1904 the slogan is sounded 'Scrobs vocat ultimus' (*Oxford Magazine*, vol. 22, p. 169). Over and above Godley's invariable courage and patience, we note his sympathy with the 'average man,' not the great pundits of scholarship, but those to whom the handling of Greek authors was an opportunity offered by the older Universities and, even when reduced to its lowest terms, was no 'Intolerable Burden' (or, to borrow Tschudi's notation, the IB) but the remnant of a great inheritance. They were his adopted clients, and he would never let them down. And he had little toleration for those who evaded a task because it was a hard one, or who prescribed 'soft options' to others. He would never have been found on pilgrimage with the poor creature who boiled his peas.

The same sympathy with the average man comes out in his championship of the writing of Latin verse (*Classical Review*, December 1917). A schoolboy might not hope to produce anything 'as good as the work of Jones *major* who tried for a Balliol Scholarship, or even as Virgil (at his best),' yet he should have the chance of turning out something which was 'his own' and not be left among those who go out into a cold world 'with all their music in them.'

Some very amiable men may be known by their antipathies, and a few of Godley's may be collected. He did not like the Mathematics, nor Motors or Motor-Buses, though the latter as Motores Bi, with genitive Motorum Borum, served him well in rhyme, nor Winter Sports, nor [Alpine] club buttons, nor Newdigate Prize Poems (in the mass). But he never failed to fall into line, and seemed to take a melancholy pleasure in shouldering an uncongenial task. He had little interest in sartorial developments, or in Faculties and Degrees of modern institution; but when it was put to him as Public Orator that he who presents scarlet-clad Doctors should himself be clad in scarlet, he made no difficulties, though preferring the decent black of the Master of Arts gown, which had been his working dress, Sundays and week-days, for a good many years. 'So, he gowned him,' being introduced, in terms of affectionate eulogy, by his old friend the President of his College.

Godley's own term of office as Public Orator began in 1914 (though he had already acted by special appointment for his predecessor). In June of that year it fell to him to present for an Honorary Degree Prince Lichnowsky, then, as we now know and as Godley had divined, labouring for peace. In terms of uncommon fervour he

breathes a hope, almost a prayer, that when all that hindered and vexed—things in themselves insignificant—had passed away, the deeper unity of genius, nobly represented by the Ambassador of Germany, might lead to a lasting understanding and mutual trust. And in 1916 he did the same office—how worthily we need not ask—for the leaders of the Allies by land and sea, of whom eight, headed by General, now le Maréchal de France, Joffre, were then honoured by the University.

The intervening years were painful ones, and it must have been a trying task to stand up before a depleted University and record the events of the year in the periodical Crewian Oration. 'There is resolute courage,' we read, 'in every line of the Oration of 1916' (which is not one of those now printed). We are carried back to the gallant stanzas of 'England at War'—perhaps the only poem in these volumes which is wholly serious—a rally to a nation then long unfamiliar with checks and reverses, in the dark days of January 1900 :

Let not the thought of private care
Unnerve a nation's arm !

In 1918 came a matter of personal interest and piety, which gave him some anxious concern beforehand, but turned out cheerfully. In that year the venerable Master of Trinity died, and a reference to him in the Oration was essential. Dr. Henry Montagu Butler, A.C. 1860–1894, had been a link between C. S. Calverley and A. D. Godley. Butler had been in the Sixth Form at Harrow with 'C. S. C.', and, becoming Head Master in 1859, held office until 1885, so that Godley, whose school years were 1869–1875, comes about half-way down the remarkable list of brilliant scholars and serviceable men who passed through Harrow during his reign. The sentences, both dignified and full of feeling, in which he speaks of the teacher to whom he owed much, called forth the approval of a Cambridge scholar known as well for the warmth of his heart as for his exacting standard of Latinity. Godley writes to the friend who had told him of this :

Postgate reads me : Postgate praises
my commemorative phrases,
views with an approving smile
my obituary style :
Postgate, who—it should be known—
is not pleased by everyone,
he who smites with mailed fists
many so-called Latinists.

The quiet postscript follows : 'But in sober prose I am much pleased, as I did not want to say the wrong things about Butler, and P. knows what is what.'

The thoughtful and sombre papers on Ireland, written from personal knowledge and out of a full heart, should be studied, as should the 'History of the Oxfordshire Regiment of Volunteers,

1914-1919,' which Godley had wished to make complete by the addition of a nominal roll of officers. The force took its beginning with citizens of Oxford and some senior graduates of the University—the younger graduates and the undergraduates were elsewhere—and then extended to the county under Godley as Colonel. In spite of scanty encouragement—to put it very mildly—from high quarters, it carried out much useful and unattractive work, such as the guarding of the Marconi station at Leafield, a place in Wychwood Forest, some eighteen miles from Oxford and difficult of access, and the actual handling of Government stores at Didcot in Berkshire. Altogether, a creditable chapter contributed by one of the smaller counties to our rough island story.

We must speak briefly of the five Lectures on English Literature, a discriminating study of the successive phases of Victorian Prose and Poetry. Perhaps the outstanding features are the writer's high esteem of Ruskin, and his personal devotion to Tennyson; in whom he found not only an artist of supreme felicity, but also an inspiring force to which other poets and other schools of poetry owed their being, and, still further, a seer who sounded the depths of thought in a difficult age. The man who in 1842 uttered such oracles as 'Knowledge comes but wisdom lingers,' and in a late decade of the century sighed over 'the love of letters overdone,' may well have made a special appeal to Godley. Yet he was no obscurantist, and some of the papers now included show research into matters of history, of the University and the City of Oxford for instance, not lying ready to the hand of every scholar or of every alderman. But he was sensitive to the danger of 'too much.' The Latin Grammar itself, with its clear teaching of right and wrong, might be obscured by an overgrowth of scientific statement, sometimes platitudinous. 'The College Cat' (*Second Strings*, p. 18) was better advised. A note of warning is sounded even to the Alpine Club:

'Inevitably, that vision is not for all, or for most. Nor indeed can it be wished that the case were otherwise. Excessive popularity might have its dangers. Let the public, *en masse*, take to climbing, and we may well imagine that there might be a cry for Brighter Mountaineering; we can conceive an appeal to make the Matterhorn Safe for Democracy. Things are better as they are.'

But we should not willingly see these volumes retrenched by a single page, and if more shall be forthcoming it will be welcome.

A. O. PRICKARD.

Among the Kara-Koram Glaciers in 1925. By Jenny Visser-Hooft. With contributions by Ph. C. Visser. 25 illustrations, 2 maps. London: Edward Arnold, 1925. 8½ × 5½ ins.

THE Karakoram Himalaya extend from the trench of the Indus on the S. to the valley of the upper Yarkand river on the N., and from the Chang-chenmo on the E. to the Gilgit river on the W.,

where they merge into the Hindu Kush. This vast mountain complex contains the biggest glaciers in the world outside the Polar Regions and Alaska. Since Vignes' explorations nearly a century ago these glaciers have been visited by many mountaineers; yet Conway's Pioneer Peak is the *only* summit which has been successfully ascended, though the Duke of the Abruzzi and Dr. Hunter Workman have been higher. There is evident justification for mountaineers to affirm that the Karakoram peaks are more difficult than those of the great Himalaya.

North of the main range, in Kanjut, a district of Hunza, we find a region of great snow mountains and bold rock peaks trenched with nearly impassable cliffy gorges, but with here and there, in the high folds of the hills, tiny woods of cedar, and sometimes, beside the torrents, little brakes of roses and small flowering shrubs, producing an entrancing contrast with the savage aridity of the scene. High above these profound gorges, towards the waterpartings, we occasionally meet with open grassy pasture valleys, their meadow bottoms fringed with willow and alder scrub and starred with primulas. The climate is generally fine and the snowfall not excessive, though the peaks run to 25,000 ft. and there is a great development of glaciers. Yet the region is so uncompromising that outside the main valley of the Hunza river there is only one permanent village—Shingshal.

It is in this region that Dr. and Mrs. Visser explored in 1925, and perfectly does Mrs. Visser describe the contrasts of this elemental country. Her account of the sustained ugliness of the Verjerab glacier, continuously swept by avalanches of mud and stones, makes but a foil to the majestic serenity of the great Batura or the immaculate purity of the Yazghil glacier with its little flower-decked bays of verdure in which she camps with such evident delight. The northern pocket of the district is entered by the gorge of the Khunjerab river, already explored to the pass at its head by Cockerill in 1892, but Dr. Visser broke new ground by exploring the tributary valley of the Barakhun. Then from the head of the Khunjerab, crossing a new pass, they entered the rat-trap of the unexplored Ghurjerab valley, which has so far defied all attempts at penetration from below. The rising waters had blocked the Khunjerab gorge behind them: down the Ghurjerab was hopeless: unless they could find a way out and over to Shingshal they must starve; nevertheless, they explored the whole of the several glacier sources of the Ghurjerab and successfully found a new and practicable route of escape to Shingshal. Then they explored the four great glaciers which flow northward from the main range into the Shingshal valley, getting right up to the foot of 'Dusto Ghil' ('a sheep-fold'). This is the Malungi Diás (24,580 ft.) of its discoverer Cockerill, more correctly spelled Malungutti-Yáz, meaning 'Middle-glacier Snow'; Mason got the name Dumata—'Father of Clouds'—just as Rakaposhi is commonly called Dumani—'Mother of Clouds.'

The topography of the south side of this great peak was most obscure and its solution demanded a long trek all the way round through Nagar and up the Hispar glacier, whence from the Kunjang glacier the secret was revealed to the Visser's and to their indefatigable surveyor Khan Sahib Afraz Gul Khan. A most successful and comprehensive examination of the whole of the huge Batura glacier, hitherto quite unexplored, was also accomplished by these untiring travellers, ably seconded by Franz Lochmatter and Johann Perren. Altogether this is one of the most remarkable and successful series of glacier explorations yet accomplished in High Asia, and the expedition is singularly fortunate in its historian.

There is very little to criticize in this delightful book. The descriptions of scenery are extremely good and the illustrations excellent. Some Indian words and place-names are spelled in a way unusual to English ears. The Mir of Hunza is a Maulai and would be horrified to be called a Sunni, whose stricter rule does not concern or confine his convivial nature; while the Mir of Nagar is a Shia and might well hate a Sunni more than an unbeliever—though all good Moslems may eat with Christians, because though 'unbelievers' we are not 'heathen' and through a different Revelation worship the One God. Happily the whole of the Gilgit Agency is singularly free from religious fanaticism, in spite of wide differences in faith and speech among its different tribes, and the people are very easy to get on with and first-rate travellers. Mrs. Visser's book must appeal to all lovers of mountain travel and is indispensable to every Himalayan library.

T. G. L.

The Eagle Ski Club. A guide to ski tours in the Upper Engadine. Map. King & Hutchings, Ltd.

It would not be fair to give a general criticism of this little book, which only claims to be an attempt 'to suit the needs of the Club and the special conditions of ski touring in the Upper Engadine.' The claim is extravagant, but, doubtless, a second edition will be more successful, as the information in this first effort is both irresponsible, fragmentary, and inaccurate—to put it very gently. The authors of a guide book incur certain grave responsibilities. Considering that the map (which includes the sheets 520 and part of 523 of the Siegfried, rather badly enlarged to 1:40,000, disfigured by colouring and some grotesque red lines), must be the source of the names, the number of misspellings is appalling and amounts to over 50 per cent. of the local names. A good example of the kind of error is *Sonner Hut* which is mentioned frequently as a starting point: few will recognize the well-known *Hôtel Sonne* in the Fexthal—accessible by carriage road. The authors are certainly to be condoled with in the following state of affairs . . . 'Albigna Hut, no data available. Capanna Cecilia. No data. Capanna Allievi. No data. . . . No data is available. They would include ski tours to the various huts mentioned and the climb

of mountains (*sic*) like Disgrazia and Bondasco (!) . . . data is required.' Such being the case, we will inform the authors that the district alluded to does *not* belong to the Upper Engadine, that there are three *Climbers' Guides* to this region, published respectively in English, Italian and German, and that the two latter carefully warn skiers to avoid the Bregaglia (= Bergell) side glens and its S. peaks. We do not wish to discourage the authors, as they really can do much better than this 'guide.' Moreover, much of their advice to skiers is excellent, and the book will not take these latter far enough from the Maloja Kursaal to get into much trouble.

TWO FRENCH 'MOUNTAINEERING' NOVELS.

Terre de Suspicion. By André Armandy. Jules Tallandier, Paris. 1926.

THE author describes this work as a *Roman d'Aventures*. It is. We give the bald outlines of a story, which, when proceeding to the Alps, will pleasantly distract the reader's attention from the dangers of French railway travel. The style is a mixture of the author and Pierre Benoit; it appears to be founded on Kipling's 'Night Mail,' 'Lost Legion,' and 'The Man who would be King.' Indeed, the author makes no secret of his admiration for the latter tale. The adventures are incredible and entertaining in the highest degree.

Aeroplane No. 1 sets forth from Paris to fly over Mt. Everest. It fails to return. Its twin brother sets out to hunt for it. Aeroplane No. 2 gets into trouble owing to magnetic rocks in the Hindu Kush. It eventually crashes, but not before the hero and a charming lady reporter, hitherto concealed *outside* the luggage tank, have contrived, accompanied by their kits and a complete arsenal, to land in parachutes. They set out on foot to find the survivors of *Avion* No. 1. These are discovered among the Lost Tribes of Kafiristan. The hero interrogates the Pilot of No. 1:—

" . . . Vous avez renoncé ? Je ne comprends pas. Avez-vous, oui ou non, survolé l'Everest ? "

" Certes, je l'ai survolé et les clichés que je rapporte le prouvent. "

" Alors ? "

" Alors. Vous vous souvenez que nous devons jeter un pavillon français, dont la hampe lestée, se planterait sur le sommet du Toit du Monde ! " . . .

" Eh bien ? "

" Eh bien. Je ne l'ai pas jeté, voilà ! "

" Pourquoi ? "

" Ah ! Pourquoi ? C'est bête comme chou. Un scrupule ! . . . c'est bien simple, il y avait déjà un pavillon qui flottait sur la cime . . . oui, un pavillon : l'Union Jack. . . . J'ai songé au deux hommes qui avaient payé de leur peau le droit de faire flotter à cet endroit-là le pavillon anglais. Et j'ai pensé que ce ne

serait pas chic de leur ravir une exclusivité si chèrement payée. Voilà l'explication."

"Non, ça n'aurait pas été chic. . . . Mais par contre c'est rudement chic pour Irvine et Mallory, ce que vous avez fait là . . . voulez-vous *secouer les mains* avec moi ?"

Truly *chic*, and the book is without a touch of the now usual Chauvinism. There is a remarkable Colonel of Gurkha Rifles, whom the hero and heroine rescue from an uncomfortable situation. We feared that he would prove to be a villain, but no, he is a true *Deus ex machina* even although he had not arrived in an aeroplane. His description does not altogether tally with that of an ex-President of the Alpine Club. All ends well.

We recommend the work to the Technical Adviser to the Royal Air Force ; for the members of the future Everest Expeditions it is, of course, indispensable.

Les Jeux Dangereux. By Henry Bordeaux. Librairie Plon, Paris. 1926.

THE less said about this work the better. The author is a well-known mountaineer, and as such ought to have known where good taste begins and ends. The scene is laid in Mürren, which appears even more deplorable in fiction than in reality. The *dramatis personæ*, who are nearly all English, resemble no one that we have ever seen or heard of—not even at Mürren. There is a Baronet who has a Marquis as a son and another who is an Earl. To do him justice, or injustice, the author is an anglophile. We could forgive him everything if it were not for a really outrageous 'interview' with a dying mountaineer whom the whole Alpine world reveres. The general bad taste of this 'interview' is astounding and has seldom been equalled in fact or fiction. If we were sure that it would not benefit the author, we should be tempted to declare that the book shall not be allowed in the Club Library or our own. Unquestionably, the author means well, and, as 'the standard of taste varies so widely in different nations,' we had better refrain from further criticism.

Bücherverzeichnis der Alpenvereinbücherei. Von Dr. A. Dreyer: München. 1927. M. 20.

THIS is a remarkable work in Alpine bibliography. In 1124 columns—two to a page—is given a minute subject-index to the volumes in a particular library containing a very large collection of books and pamphlets relating to mountain districts and to mountaineering. The composition of an index which would include all works of the kind would be too large to be undertaken ; but this within its necessary limits will prove to be extremely useful. The compiling must have been a heavy task. The result is excellent, as the work has been very carefully done. Subjects and geographical names are arranged alphabetically in one continuous list, and under each

heading the authors are again arranged alphabetically. A *Verfasser- und Bergnamenverzeichnis* is given at the end, making reference to the work itself very easy. Leading articles in publications of Alpine Clubs are included. As an example of the extent of entries, we note that under *Mont Blanc* there are sixteen columns, with 390 separate entries. As an example of division of subjects may be taken *Lechtal*, *Lechtaler Alpen* (*Allgemeines*), *Lechtaler Alpen* (*Heiterwandgebiet*), *Lechtaler Alpen* (*Klostertaler Berge*), *Lechtaler Alpen* (*Parseier Kette*). The library treated of is more than a strictly Alpine library, for there are headings here such as *Monte Carlo*, *Montreux*, *Mont St.-Michel*, *Mosel*, *München*. As a work of reference the book will prove of great use. A minor matter of interest, yet one which must have given considerable trouble, is that the Christian names of authors are added as far as possible in those cases where they do not occur on their published works.

THE ALPINE CLUB LIBRARY.

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'I had noticed in King's in the morning a fine-looking boy, evidently a freshman, just in front of me—to and behold the same came to call on me, and turns out to be Mallory, from Winchester, one of new exhibitors at Magdalene. . . . A simpler, more ingenious, more unaffected, more genuinely interested boy, I never saw. He is to be under me, and

I rejoice in the thought. He seemed full of admiration for all good things, and yet with no touch of priggishness.

Editor's note: 'Of all the friends that he ever found among the undergraduates of his college, none was nearer or dearer to him than George Mallory. For both of them, there was much reward in this alliance, which lasted till Mallory's death upon Mount Everest.'

Pp. 172-3: June 28, 1907.

'One does not often get the society of an ingenuous and congenial young man [Mallory], who is sincerely affectionate, to oneself. . . . It has beguiled my depression in these gloomy days as nothing else could have done; he has walked with me as the angel walked with Tobit.'

May 24, 1923.

'He [Mallory] is a bright and gallant figure, and has much personality.'

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First ascents: Westl. Wimbachkette; Pte. Mérid. de la Selle; winter, Gr. Pic de la Meije.

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Boeck, Karl. In Banne des Everest. Erlebnisse in Nepal. 9½ × 6½: pp. 105: plates. Leipzig, Haessel, 1926

Browne, G. St. J. Orde. The Vanishing Tribes of Kenya. London, 1925
Pages 256-7:

'The mapping of the glaciers of Kenya was one of my ambitions, but unfortunately I never had the opportunity or time to spare for this arduous task; my highest point was nearly 15,000 feet, but I was forced to return owing to lack of equipment and time, and such work as I was able to do in the way of surveying has since been quite eclipsed by that of Dr. Arthur. The collections I made on that occasion were sent to the S. Kensington Museum, while I retain for my own satisfaction the memory of the truly wonderful view of distant Kilimanjaro from the upper slopes of Kenya, as it glimmered like a flamingo's feather in the light of the rising sun, after a miserable night which we spent huddled over a fire of heather roots, with the temperature many degrees below freezing, and our heat-accustomed lungs and skins trying in vain to adjust themselves to the startling change. I believe myself to have been the first white man to see this view; my nearer acquaintance with Kilimanjaro was made when I was in command of a battery in action in the plains beneath. The two great mountains are now under one flag.'

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Ascent Kibo, 4 July 1926 : Kaiser Wilhelmsspitze, 19,710 ft., by Latham and R. v. Deehend.

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Riekmers, Willi Riekmer. Die Wallfahrt zum Wahren Jakob. Gebirgs-
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London, Seeley Service, 1926. 12s. 6d.

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Paris, Fischbacher, 1926. Fr. 31.50

H. de Ségogne, Massifs de l'Aig. Verte et des Courtes: E. de Gigord, Chamonix du Moine: J. de Lépiney, Aigs. Sans Nom et du Dru: J. A. Morin, Aigs. Ravel et Mummery, Massif des Courtes.

Seidlitz, Wilfried von. Entstehen und Bergehen der Alpen. Eine allgemein-verständliche Einführung besonders für Bergsteiger und Freunde der Alpen 9×6 : pp. xviii, 267: ill. Stuttgart, Enke, 1926. M.13.

Der Berg als Bauwerk: Baumaterial der Alpen: Decken u. Aufbau der Alpen: Zerstörung der Gebirge.

Sieger, Robert. Zur Geographie der deutschen Alpen. 19×7 : pp. vii, 234. Wien, Seidel, 1924

Professor Dr. R. Siger zum 60. Geburtstage gewidmet von Freunden und Schülern.

A collection of articles on the German alps by A. Penck, N. Krebs, A. Aigner, J. Sölch, V. Paschinger, F. Heiderich, R. Marek, etc.

Sieghardt, August. Der Wendelstein. Eine Monographie. $7 \times 4\frac{1}{2}$: pp. 155: pls. München, Alpenfreund, 1924

Silva, P. Le ascensioni sull' Everest. Loro difficoltà—pericoli . . . e utilità per le scienze. Ex Civiltà cattolica, vol. 4. 9×6 : pp. 51. Roma, 1926

Sponder, Harold. The fire of life.

1927

Page 152:

'Meanwhile I was becoming more and more absorbed in foreign travel. A passion for climbing mountains led me in 1896-7 to traverse the Pyrenees from east to west, and even to write a book about the journey. In the following years I climbed extensively in the Dolomite mountains of the Tyrol, precipitous peaks that give every facility for those who seek a swift and early end to their earthly troubles. My first summer holiday with Lloyd George, also a keen traveller, was an adventurous walk thro' the heart of the Bavarian mountains—the Salzkammergut—where he showed himself to possess all the latent capacities of adventure that go to make a mountaineer.'

Stolfi, Carlo. Rilievo stereofotogrammetrik del ghiacciaio del Lys. In *L'Universo*, Firenze, anno 8, num. 1. $9\frac{1}{2} \times 6\frac{1}{2}$: pp. 5-8: map, ill.

Gennaio, 1927

Strauss, Richard. Programme notes of 'An Alpine Symphony.' 10×7 : pp. 2. 1926

First published in 1915.

Switzerland. Schweizer Reisen. Bibliographie der Reiseliteratur. $7\frac{1}{2} \times 4\frac{1}{2}$: pp. 64. Zürich, Schweiz. Verkehrszentrale, 1926

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Tirol. Natur Kunst Volk Leben. Hfte. 2-3. 12×9 : plates. 1926

— The situation in South Tyrol 1918-25. Anonymous.

Contains (p. 37) decree of 1921 abolishing all Alpine Clubs except the C.A.I.

Views. Gravures anciennes, suisses et autres. Catalogue 42. 9×6 : plates. Genève, Mincieux, 1926

— Catalogue (typed) of coloured plates of Switzerland scenes and costumes and of books containing such plates: in the possession of Mr. R. W. Lloyd, 1927

Presented by Mr. R. W. Lloyd. Compiled by Mr. F. Oughton.

Visser, P. C. Explorations in the Karakoram. In *Geogr. Journ.*, London, vol. 68, no. 6. 10×6 : pp. 457-73: map, ill. Dec. 1926

Visser-Hooft, Jenny and Ph. C. Among the Kara-Korum Glaciers in 1925. $8\frac{1}{2} \times 5\frac{1}{2}$: pp. x, 300: map, pls. London, Arnold, 1926. 21s.

Wagner's Alpine Spezialführer. $6 \times 4\frac{1}{2}$: pp. viii, 392: maps. Innsbruck, Wagner, 1925

Ward, F. Kingdon. The riddle of the Tsangpo gorges. $8\frac{1}{2} \times 5\frac{1}{2}$: pp. xi, 328: pls. London, Arnold, 1926, 21s.

Waters, Helena L. From Dolomites to Stelvio. $6\frac{1}{2} \times 4$: pp. xv, 272: pls. London, Methuen, 1926. 7s. 6d.

Wattier, Capitaine. Eau, neige et glace dans le massif du Goundafi. In *La Géographie*, Paris, t. 46, nos. 5-9. $10 \times 6\frac{1}{2}$: pp. 344-51. Déc. 1926

Whymper, Edward. Die Erst-Besteigung des Matterhorns am 14. Juli 1865. Gewidmet d. Vereinigung 'Berliner Bibliophilen-Abende.' 10×8 : pp. 18. Darmstadt, Hofmann, 1927

A beautifully printed translation: 300 copies, at 3s. each.

William II. My early life. 1926
Pages 194-6.

'One of the men who later belonged to my more intimate circle was among those with whom I became better acquainted in the course of the eighties. This was Professor Paul Güssfeldt. . . . He gained the Iron Cross at Mars-la-Tour in 1870. Subsequently he made a name for himself by his eminent achievements as an Alpinist . . . and he wrote an enthralling book on his experiences. His verbal descriptions of the Alpine world—its beauties, its overwhelming majesty, and its dangers—given me on our walks or rides were uncommonly fascinating. . . . Our friendship remained unaltered to his death. . . . Güssfeldt was my companion on all my Scandinavian tours. . . . I cherish a profoundly grateful remembrance of my friend Paul Güssfeldt.'

The Winter Sports Annual. Edited by J. B. Wroughton. $7 \times 4\frac{1}{2}$: pp. 150. London, Palmer, 1927.

Young, Geoffrey Winthrop. On high hills. Memories of the alps. $8\frac{1}{2} \times 6\frac{1}{2}$: pp. xiv, 368: plates. London, Methuen, 1927. 18s.

Younghusband, Francis. The epic of Everest. $8 \times 5\frac{1}{2}$: pp. 319: pls. London, Arnold, 1926. 7s. 6d.

Older Books.

Allom, T., and G. Pickering. Lake and mountain scenery. Westmorland and Cumberland. $5 \times 8\frac{1}{2}$: 30 steel plates. London, Jackson [c. 1830]

Barnard, George. The continental drawing book, for the use of Advanced Pupils, being views in Switzerland, the Alps, and Italian lakes. $10\frac{1}{2} \times 14\frac{1}{2}$: 13 plates on stone. London, Ackermann, 1837

- Dean, John Fred.** The Tourists; or continental travelling: Showing how Sir Toby Jinks and Family, with a few friends, went to Switzerland and came safely home again. A harmless satire in Hudibrastic metre. 7 × 4½: pp. 70: ill.
- Decker, Karl.** Dr. Frederick A. Cook—faker. In Metropolitan Mag., New York, vol. 31, no. 4. 10½ × 7: pp. 417–35: ill.
- Hobbs, W. H.** Les glaciers du monde actuel. Ex Rev. Géogr. alp., vol. 10. 9½ × 6½: pp. 99, ill. 1922
- [Holworthy, Miss S. M.]** Alpine Scrambles and Classic Rambles. A Gipsy tour in search of summer snow and winter sun. 5½ × 3½: pp. vii, 114. London, Nisbet (1882)
- Lake District.** Diary of a fortnight's trip through the English lake district and Scotland in July 1867, by a few friends. 6½ × 4: pp. 93. Birmingham, Milling, 1867
- Illustrations of the Lakes. 5½ × 8½: 29 plates. London, Harwood (1846)
- Leaspach.** Chateau of Leaspach; or, the Stranger in Switzerland. 3 vols. 7½ × 4½: pp. 278, 253, 223. London, Newman, 1827
- Liébana y los Picos de Europa.** 9½ × 6½: pp. 206: ill. Santander, La Atalada, 1913
- Markham, Frederick.** Shooting in the Himalayas. A journal of sporting adventures and travel in Chinese Tartary, Ladao, Thibet, Cashmere, etc. 10 × 6: pp. xii, 375: plates. London, Bentley, 1854
- Ogilvie, Alan G.** Geography of the Central Andes. A Handbook to accompany the La Paz Sheet of the Map of Hispanic America. 8 × 5½: pp. xi, 240: maps, pls. New York, Amer. Geogr. Soc., 1922. \$3.
- Geology, climate, soils, vegetation, fauna, inhabitants, bibliography.
- Pope Pius XI.** Epistola apostolica ad R. P. D. Florentium du Bois de la Vellerabel, episcopum anneciensem: de sacris sollempnibus honori sancti Bernardi a Benthone decretis. In Acta apostolicæ sedis, vol. 15, no. 9. 10½ × 7½: pp. 437–42. Sept. 1, 1923
- The following portion is of special interest here:
- ‘Namque ex omnibus exercitationibus, quibus honesta oblectatio quaeritur, nullum genus dixeris esse isto salubrius—dummodo omnis temeritas absit—ad animi valetudinem, nedum corporis. Cum dure enim laborando et ad maiorum usque tenuitatem aeris puritatemque nitendo renoventur vires ac roborentur, tum etiam, fit, ut et difficultatibus omnis generis eluctandis constantior ad officia vitæ vel ardua evadat animus, et illam rerum immensitatem ac speciem contemplando, quæ ex Alpium sublimitate circumspicientibus patent facile ad Deum, naturæ auctorem et dominum, mens assurgat.’
- Post-cards.** Gran Sasso d'Italia. 18 cartoline. Bottega dell' esploratore. Roma, 1926
- Rigi.** Circular col. view from Rigi set up on ivory as a fan, c. 1825.
- v. Schwerin, Detlof.** Führer durch die Tannheimer Berge. Hsg. v. d. Akad. Sekt. München d. D.u.Oe.A.-V. 6½ × 4½: pp. 156 München, Alpenfreund, 1922
- Switzerland.** Journal of a tour in France, Switzerland, and Lombardy, crossing the Simplon, and returning by Mont Cenis to Paris. 2 vols. 8 × 4: pp. 24, 224: plates. Brentford, Norbury; London, Baldwin Cradock. 1821
- Willink, H. G.** Alpine sketches. Photographic reproductions of 32 sketches. 6½ × 4½.
- Wundt, Theodor von.** Matterhorn. Ein Hochgebirgs-Roman. 8 × 5: pp. 286: plates. Berlin, Bong, 1916
- Höhenflug. Ein humoristischer Roman. 7½ × 4½: pp. 201: ill. Berlin, Bong, 1918
- Ioh und die Berge. Ein Wanderleben. 8 × 5: pp. 365: pls. Berlin, Bong, 1917
- Das Diadem. Ideale und Illusionen. Ein Höhenroman. 8½ × 5½: pp. 290: plates. Berlin, Bong, 1926

PROCEEDINGS OF THE ALPINE CLUB.

THE ANNUAL GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, London, W. 1, on Monday, December 13, 1926, at 8.30 P.M., Sir George H. Morse, *President*, in the Chair.

The following candidates were balloted for and elected Members of the Club, namely, Mr. John Bagwell, Mr. William Bellows, Mr. Robert James Brocklehurst, Mr. Thomas Graham Brown, Dr. Charles Frederick Hadfield, Mr. Yuko Maki, Mr. Edmund Giffard Oliver (re-elected), Dr. Edward Edmondson Paget-Tomlinson, Monsieur Pierre Solvay, Mr. Nicolas Alexander Tombazi.

The PRESIDENT, in accordance with the provisions of Rule 29, there being no other candidates, declared the following Members nominated by the Committee to be duly elected as Officers of the Club and Members of Committee for the year 1927 :

As Vice-President.—Dr. T. G. Longstaff, in place of Mr. John J. Withers, C.B.E., M.P., whose term of office expires.

As Members of Committee.—Messrs. R. A. Frazer, S. B. Peech, D. R. Pye, Eustace Thomas and H. E. G. Tyndale, in the places of Messrs. R. P. Hope, H. J. Mothersill, C. A. Elliott, E. F. Norton and C. H. Pasteur, whose terms of office expire.

The President, Sir George H. Morse, the Vice-President, Mr. R. P. Bicknell, the Honorary Secretary, Mr. Sydney Spencer, and the other Members of Committee, being eligible, were re-elected.

Mr. J. E. C. EATON proposed, and Mr. E. H. F. BRADBY seconded, that Mr. W. M. Roberts and Mr. H. J. Macartney be appointed Auditors to audit the Club Accounts for the current year. This was carried unanimously.

The PRESIDENT said Members had been notified that Mr. George Yeld and Capt. J. P. Farrar, D.S.O., had resigned their Joint-Editorship of the ALPINE JOURNAL, and this being the first occasion on which the Club had met since that announcement, he felt sure that Members would desire to express their appreciation of the great services rendered to the Club by these two gentlemen. Mr. George Yeld had served for thirty years, and Capt. Farrar for the past eighteen years, and he had great pleasure in moving a formal vote of thanks to them. This was duly seconded, and carried with great acclamation. Mr. GEORGE YELD and Capt. FARRAR briefly replied.

Dr. T. G. LONGSTAFF proposed in felicitous terms a vote of thanks to Mr. John J. Withers, C.B.E., M.P., for his services to the Club during his term of office as Vice-President. This was received with acclamation.

A very cordial vote of thanks, proposed by Lt.-Col. E. L. STRUTT, C.B.E., D.S.O., to the Honorary Secretary, Mr. Sydney Spencer, for

his work in arranging the Exhibition of Photographs, was duly passed with applause.

The PRESIDENT announced that the congratulations of the Club had been sent to The Right Rev. Bishop G. F. Browne on the attainment of his 93rd birthday.

The PRESIDENT announced with regret the death of Mr. James Jackson, who was elected in 1883.

Mr. R. W. LLOYD then read a Paper entitled 'The First Direct Ascent of the N. Face of the Aiguille de Bionnassay,' which was illustrated by lantern slides.

Discussion followed, and the proceedings terminated with the thanks of the Members being voted with acclamation to Mr. R. W. Lloyd.

An Exhibition of Alpine Photographs was held in the Hall of the Club from Wednesday, December 8, 1926, to Saturday, January 1, 1927, and in connection with this an 'At Home' was held on Tuesday, December 14, when about 400 persons—Members and their friends—attended.

THE ANNUAL WINTER DINNER was held in the Edward VII Rooms, Hotel Victoria, on Tuesday, December 14, 1926, at 7 P.M., Sir George H. Morse, *President*, in the Chair. There were present 267 Members and guests, amongst the latter being The Right Honourable Hugh P. Macmillan, K.C., Professor Leonard Hill, F.R.S., The Right Hon. Lord Justice Lawrence, Mr. A. J. Haselfoot, President of the Oxford Mountaineering Club, and Mr. J. L. Longland, President of the Cambridge Mountaineering Club.

A GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, London, W. 1, on Tuesday, February 1, 1927, at 8.30 P.M. Sir George H. Morse, *President*, in the Chair.

The following candidates were balloted for and elected Members of the Club, namely, Mr. James Ramsay Montagu Butler, Mr. Ernest Montague Jackson, and Dr. J. Monroe Thorington.

The PRESIDENT announced with regret the death of Mr. Harold Raeburn, who was elected in 1904.

Mr. G. N. HUMPHREYS read a Paper entitled 'Some Ruwenzori Peaks,' which was illustrated by lantern slides. Mr. D. W. Freshfield and Mr. A. L. Mumm took part in the ensuing discussion, and finally Mr. G. N. Humphreys was accorded a vote of thanks.

A GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, London, W. 1, on Tuesday, March 1, 1927, at 8.30 P.M., Sir George H. Morse, *President*, in the Chair.

The following candidates were balloted for and elected Members of the Club, namely, Brig.-Gen. E. D. Money, C.I.E., C.V.O., D.S.O., and Mr. Hugh Rutledge. The Very Rev. T. C. Fry, D.D., was re-elected a Member of the Club.

The HONORARY SECRETARY and TREASURER, Mr. Sydney Spencer, presented the Accounts for 1926, which were duly adopted.

A vote of thanks to the Auditors, Mr. H. J. Macartney and Mr. W. M. Roberts, was passed with acclamation.

Mr. C. M. SLEEMAN read a Paper entitled 'An Ascent of Olympus and of some Balkan Mountains in 1926,' which was illustrated by lantern slides. Mr. L. A. Ellwood, Mr. A. L. Mumm, Lt.-Col. E. L. Strutt, and Mr. H. V. Reade took part in the subsequent discussion, and a vote of thanks was accorded the reader of the Paper.

A GENERAL MEETING of the Club was held in the Hall, 23, Savile Row, London, W. 1, on Tuesday, April 5, 1927, at 8.30 P.M., Sir George H. Morse, *President*, in the Chair.

The PRESIDENT announced with regret the deaths of Mr. Arthur Johnson, elected in 1870, Mr. Walter Leaf, elected in 1871, Monsieur Jean Maitre, elected in 1888, and Prince Borghese, elected in 1898.

Mr. E. G. OLIVER then read a Paper entitled 'Some Notable Alpine Passes,' which was illustrated by lantern slides. Dr. T. G. Longstaff, Capt. J. P. Farrar and Mr. R. W. Lloyd took part in the discussion which followed, and finally the reader of the Paper was accorded a vote of thanks by acclamation.

THE
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RAYMOND BICKNELL.
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THE ALPINE JOURNAL.

NOVEMBER 1927.

(No. 235.)

CLOSING THE ITALIAN ALPS.

IT is with great regret that we find ourselves compelled to record the existence on the Alpine frontiers of Italy of a system of obstruction to free travel, unprecedented, we believe, in times of peace. Along the whole extent of the chain from the Maritime Alps to Tyrol, the Trentino and Jugoslavia, the mule and glacier passes have been during the past summer more or less closed to travellers desirous of entering or leaving Italy. Members of the Alpine Club have found the Foreign Office passports, which the Italian Government formally declares to be the only documents necessary for visitors to Italy, wholly disregarded by individuals claiming to act under some official authority. British travellers, both men and ladies, mountaineers and local guides, have been not only turned back summarily and without warning, but arrested and detained and even in some cases deliberately aimed and shot at by bands of youths describing themselves as 'Local Guards' or 'Fascist Militia.'

The facts above stated are, unfortunately, not open to question. The Editor of the ALPINE JOURNAL has had brought to his notice some thirty instances, authenticated by thoroughly trustworthy evidence, of interference with travellers. He has himself had personal experience of others. Several of the worst, in which firearms have been used, have occurred on the French frontier and in the neighbourhood of the Mont Cenis.

If we may believe a telegram in *The Times* from its Roman correspondent, the Italian Government denies having issued any instructions that could possibly have authorized the forcible closing to travellers of the High Alps. In a later telegram, however, (published on August 29, 1927) from the same corre-

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spondent, we read as follows :—‘ The exercises of the Fascist Militia in Northern Italy have now ended and General Bazan, Chief of Staff of the Fascist Militia, is highly satisfied with their success. In a statement made to a Fascist weekly publication, he points out the efficiency of this voluntary corps, its perfect organization, and the task which is reserved for it in case of war. He says that perfect discipline has reigned among all ranks of the “ Black Shirts ” throughout the manœuvres and that their enthusiasm and interest in the military exercises were such that their commanding officers were forced to issue orders *to prevent incidents due to their excessive ardour for battle.*’

‘ For battle ’ ! With whom, we ask, did these Italian Don Quixotes desire to do battle ? The native cowherds, or innocent tourists and their guides ?

At first sight there may seem to be a notable discrepancy between the two telegrams cited above, but the phrase we have italicized in General Bazan’s report on the proceedings of the irregular force lately under his command may serve to suggest a plausible explanation of what has happened. It would seem that local militia, imperfectly disciplined and acting in small detachments, have, without authority, discharged their martial ‘ ardour ’ by creating the recent ‘ incidents ’ referred to, in which the chief sufferers have been travellers duly provided with the documents required and recognized by the Italian Government. They have, of course, not been the only sufferers. The population on both sides of the frontier have found themselves deprived of the stream of summer visitors to whom they look for an annual harvest.

The ALPINE JOURNAL has nothing to do with the matter of our complaint in its political aspect. But in its practical consequences it affects the mountaineers of all nations, and most of all our own Members, who since the time of John Ball and F. F. Tuckett have done much by their example and their writings to further the exploration and the development of the *Italian Alps*. We have felt it therefore impossible to pass over without notice the arbitrary and apparently unauthorized interferences with the movements of travellers to which our attention has been called, both privately and in the Press. Having done so, we are content to leave any further remonstrance in the hands of that very competent body, our ancient ally, the Club Alpino Italiano. We feel confident that it will spare no trouble to prevent the repetition of incidents that have pained all friends of Italy. It may surely be trusted to see to it that the Italian Alps are not permanently excluded from *The Playground of Europe* !

WITH THE SHAKSGAM SURVEY PARTY—1926.¹

BY THE LATE MAJOR H. D. MINCHINTON, M.C.

IN 1926 it was my good fortune to be attached to a party despatched to the E. Karakoram by the Survey of India. In that it was a survey expedition, climbing was a minor consideration, being only permitted by the survey officer in charge of the party when the objects of survey work made it necessary. This necessity lay in finding practicable ways over glaciers and snow passes for the party to further its explorations, and in ascents of minor summits in the search for routes.

The region which the party explored is, however, of great interest, and the resulting map fills in some 1200 square miles of hitherto unexplored country. The region lies N. of the main chain of the Karakoram range, from K² in the W. to the Remo glacier in the E., with a line drawn somewhat S. of the Aghil pass due E. to the Yarkand river as the N. boundary, a line slightly W. from that pass to K² as the W. boundary, and the line of the Yarkand river as the E. boundary. A large portion of this area was surveyed, some more was sketched—*i.e.* roughly surveyed—and the small portion already surveyed in Valley 'I.' by Col. Wood, Survey of India, re-surveyed on a larger scale and certain unavoidable inaccuracies corrected.

There remain, however, certain portions which the party unfortunately failed to reach, the final exploration of which should prove highly interesting.

The exploration party was in charge of Major Kenneth Mason, M.C., R.E., Survey of India, and it is noteworthy that he has now been awarded the 'Founder's Medal' by the R.G.S. for this expedition.

The other survey officer was Khan Sahib Afraz Gul Khan, of whom it is impossible to speak too highly and without whom the results would have been decidedly less. His name is, of course, familiar to members. In 1925 he was attached to the Viissers' expedition in Hunza, and in both expeditions brought back fine plane table maps of the districts explored. His work with the transport and in camp proved not the least valuable of his varied activities.

¹ Major Minchinton suggested that this paper should be considerably curtailed. Under the circumstances, we prefer to publish it *in toto* as a slight memorial in this JOURNAL of a gallant soldier, mountaineer and explorer.—EDITOR.

Attached to the expedition were Major R. C. Clifford, D.S.O., M.C., I.M.S., who, besides looking after the health of the expedition, helped with transport arrangements and specialised in botany and geology; Captain F. O. Cave, M.C., the Rifle Brigade, whose side lines were meteorology, ornithology, and the not unimportant matter of the feeding of the British officers' *personnel*.

My own work was such alpine work as was required, the feeding and clothing of the Indian and Ladaki *personnel*, with entomology as a side line, and also the military report on this new region. A Survey Havildar and three Gurkhas of my battalion completed the party.

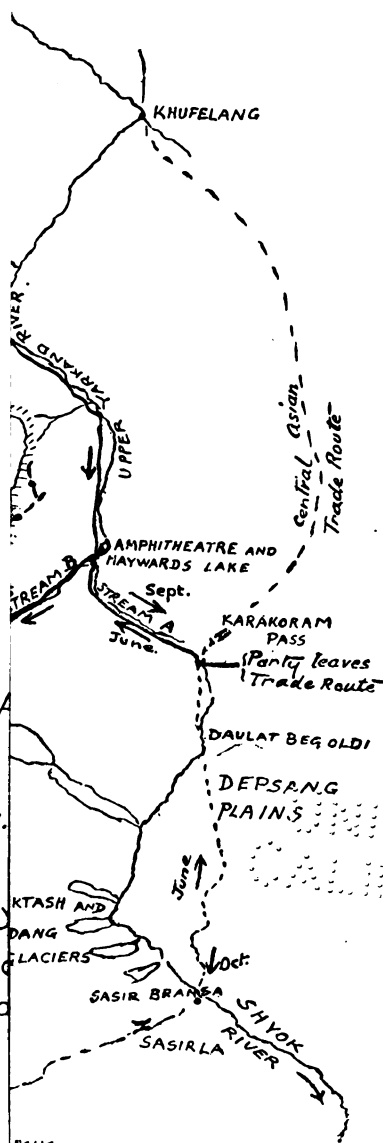
In 1889 Sir Francis Younghusband, after crossing the Aghil Pass from the N., had looked up the Shaksgam valley and reported its head as full of glaciers.

In 1914 Col. Wood, then with Cav. F. de Filippi's expedition, looked down a valley, which he called 'H,' from his Pass 'G,' and which he believed to be the true source of the Shaksgam river. He reported that no glaciers were visible. From these two reports naturally arose considerable doubt as to whether these two valleys could be one and the same, and it was surmised that Col. Wood's Valley 'H' might possibly break N. through the Aghil range to the Yarkand river.

The main object of the expedition was to clear up this moot point, and it was originally intended to follow Valley 'H' right down and link up with Sir F. Younghusband's exploration. Certain difficulties, which were unexpected but which were really not insuperable, prevented the execution of this plan. After definitely fixing the source of the Shaksgam river, surveying the upper Shaksgam valley and confluents, and photographing the Middle Shaksgam with the new 'Wild' photo-theodolite, the Aghil range was crossed, and a large portion of this hitherto unknown range—or series of ranges—was successfully explored and surveyed. Attempts were made to get back to the Shaksgam lower down, but these all proved abortive—the rivers were now all in spate and the gorges proved inaccessible.

The party assembled in Kashmir on April 18, where three weeks were profitably spent in checking the stores and equipment from home, supplementing supplies by local purchase, and attending to the many necessary details, on the careful forethought of which the success of such an expedition must largely depend. Great credit is due to Mason for the thoroughness of the preparations. The R.G.S. was naturally very much

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interested in the expedition and had generously supplied Whymper tents and sleeping bags, besides the 'Wild' photo-theodolite.

Unfortunately the spring weather was atrocious in the Himalayas in 1926, but thanks to weather reports telegraphed to Mason from Simla, we were able to slip over the Zoji La during a break by lantern light on the night of May 15, and reached Leh without incident on May 27.

Here we purchased 21 ponies which were to remain with us throughout—unfortunately 10 died before our return, mostly owing to lack of grass—and engaged 24 permanent Ladaki porters, who proved in every way splendid fellows. Here also we purchased the bulk of the food supplies for the porters, and also blankets and sheepskins for them and our other followers to supplement jerseys, gloves, etc., brought from India.

We were to follow the Central Asia trade route—the highest and most difficult in the world—as far as the Karakoram pass, and then strike off to the N.W.

Owing to the late snowfall no caravans had yet come through, and traders were waiting for our party to open the passes this year. The first pass, the Khardong La, 17,500 ft., caused us some delay. Clifford and I attempted to get the bulk of our transport—yaks—over the pass on June 7, but failed miserably. The yaks could only get to about 16,000 ft., so we made a dump of the loads and returned to Leh, after I had gone to the top of the pass to look at the state of the far side.

On June 9 I went into residence at the foot of the pass and on the 10th Mason and I went to the top with some laden porters and unladen yaks to break the trail. Next day Cave and I went to the top, taking more porters and yaks. On the 12th, Mason, Clifford and the remainder of the party came up to the camp and a very large army of yaks.

We had a great day on the 13th, and managed to get nearly everything over the pass and down to a camp on the far side, but it was a very strenuous day for us all. I shall not forget the spectacle of a large yak, which, becoming alarmed just before the summit of the pass, turned and ran down the steep slope, with the result that it turned a complete somersault, and landed right way up again on its legs. Unfortunately we lost three yaks killed by falls on the northern slopes. Only half of our 21 ponies could be got as far as the top on the 13th, and that with great difficulty owing to the soft deep snow, into which they sank and out of which we had to lift and drag them for hours. They had to spend the night on the pass; the second

half had to be sent back from the worst patch and came over the following day.

Five days of easy going took us to Panamik, in the Nubra valley, the last village on the trade route. We halted two days here to collect the pony transport which was to take us to our base and leave us there : here also we laid in a stock of 'grim' (grain) for our ponies.

We now took on some 150 ponies—and a few yaks to aid in trail-breaking over the Saser La, a few days ahead. The ponies on this trade route lead a short and rather terrible existence, being worked for a few years and then generally perishing by the wayside. The whole trade route is well marked by hundreds of skeletons which bear pathetic witness to the lack of grass and arduous nature of this high-level route.

June 21 saw us really off with all traces of civilization left behind for many months. Two marches took us to Sangposhi, where we halted for the night in a sandstorm. Next day Mason and I started at 9 A.M. with unladen porters to see what the Saser La conditions were, and to break and cut passages through drifts and across slopes, where the winter snow still lay thick. During the afternoon I reached a point near the top of the pass, whence the remainder appeared simple. We met an unfortunate trader, coming from the Yarkand side, who had misjudged the date by which he had hoped we should have opened the pass. He had had to abandon his caravan on the far side and was now trying to descend on our side with a few ponies and men, who, like himself, were snowblind and all in a bad way. We were able to render timely aid and received many blessings.

Mason and I camped at the foot of the pass, and the former sent back orders for the expedition to get under way at 2 A.M. on the 24th, so that they could reach the foot at 5 A.M., which they did. I started shortly before their arrival and spent a strenuous two hours cutting a passage in ice from the last rocks to the flatter and snow-covered glacier surface—this being a glacier pass. We had some trouble with our temporary transport—the only time during the expedition—and had a good deal of manhandling of loads and snow-bogged ponies, but eventually everything reached Saser Brangsa on the far side by 9 P.M. Unfortunately we lost 2 or 3 ponies crossing the pass.

There had been some talk of part of the party taking the northern route with our porters from Saser Brangsa to Dualat Beg Öldi—the route via the Aktash and Komdong glaciers

(crossed by Dr. Longstaff and Oliver in 1909) which can only be used for caravans on the rare occasions when none of the glaciers, which advance and retreat rapidly, block the upper Shyok.

It was, however, decided to continue together on the out journey, leaving the alternative route to be visited by at least some of us during the return journey. Major Oliver, in Kashmir, was particularly keen for us to revisit this route. We crossed the Shyok river next morning, and winding up gorges for three days, camped on June 27 in the middle of the Depsang plain, at the stone where De Filippi had made his base camp in 1914. We were treated to a mild snowstorm during the ensuing night.

On the 28th we crossed the Chipchak river, passed Dualat Beg Öldi and camped a few miles short of the Karakoram pass. From Panamik to the Depsang we had passed through Alpine country—towering peaks and many glaciers—but now the country became more Tibetan—high rolling hills, some of them snow-capped.

The 29th saw an important stage of the journey reached. We left the Karakoram pass to the E., crossed an almost imperceptible col, about 17,800 ft., and struck down Wood's Valley 'A,' and at 4 p.m. reached the Yarkand river at what we thought must be Wood's 'Amphitheatre,' where we camped and got a little very scant grazing for the transport.

We rested here next day, discovering the real Amphitheatre together with Hayward's lake (which that early explorer had thought to be the source of the Yarkand river) a few miles down the river. We also shot a few Tibetan antelope and everyone had a feed of fresh meat. The wind here was bitterly cold.

On July 1 we started up Valley 'B,' passed close to the snout of a branch of the Remo glacier which gives birth to the Yarkand river, and struck up Valley 'F' in a blinding snowstorm, which was luckily of short duration. We made camp within easy distance of Pass 'G' which was to give us access to the unknown land and which lay invitingly at the head of easy slopes at the top of the valley.

I see a remark in my diary to the effect that 'the wind has caught our faces badly again.' It was pretty chilly about this period, and our beards had not yet become such useful and impervious doormats as they subsequently became.

Early next morning, July 2, we stood on Pass 'G' and looked down into 'the valley'—'the great unknown,' the goal

at which we had arrived, and into which our thoughts had been projected for many months—in Mason's case, for years.

At the summit—17,930 ft.—we spent 4 hrs. starting the survey work from the previously fixed points behind us. Mason set up the photo-theodolite and the Khan Sahib commenced on his plane table the map, the gradual growth of which we were to watch with so much interest through the succeeding $3\frac{1}{2}$ months.

As Wood had stated, we 'looked down a broad valley' into which no glaciers flowed. But what we also observed was that, after some 10 miles, the valley narrowed and became a gorge, and that at some 20 miles or more the valley appeared to hit at right angles against a line of snow peaks, and it was absolutely impossible to make out whether the valley then broke W. or E. If the former, it was probably the Shaksgam; if the latter, it must break through to the Yarkand, and we must look for the Shaksgam elsewhere.

Mason hoped that the line of snow peaks would prove some hitherto uncharted giants, but the result of calculations gave them a mere 23,000 ft. and less—so henceforward they were called the 'Tiddlers'—in point of fact they lay on the outer Aghil range—the Red wall. A snow pass through them was visible—our subsequent 'Marpo La.'

We camped a few miles down Valley 'H' at a spot where a little grass gave welcome feeding to the ponies, of which the conditions were taking sad toll. That evening we put 'The Entry of the Gladiators' on the little gramophone which I had brought—a fitting refrain which I had kept for our first night in 'the valley.'

On July 3 we got down, through the gorge we had seen, to 16,200 ft., and made our base camp. The gorge was, during its narrowest stretch of about a mile, barely wide enough for pack animals, and was probably quite impassable later on in the year.

The stream we were following, which we soon found definitely to be the Shaksgam, rises from the glacier which forms one flank of Pass 'G'—a branch of the Remo. The Yarkand and Shaksgam rivers therefore both rise from branches of the Remo, and within a few miles of each other, though flowing N. and N.W. respectively and not joining for over 100 miles. Though the Yarkand is regarded as the main stream the Shaksgam actually brings to their junction a far larger flow of water, tapping as it does the huge glaciers on the northern slopes of the Karakoram range—Alpine country—whereas the



Phot. H. D. Minchinton.

THE MARPO-LA, 18,500ft.



GROUP IN YARKAND VALLEY
With 'Expedition' Gurkhas.



FROM 'SHORT-CUT' COL, 19,500ft.
 Left : Aghil Ridge, 23,000ft. Right : K² and 'Staircase' Peak.



Phots. H. D. Minchinton.

VIEW W. FROM ABOVE COL.
 N. face of 'Red Wall'; K² and Gasherbrum.

Yarkand runs through far more barren, sunless and Tibetanlike lands, tapping but small glaciers. The amount of water in some small streams, during the flood season, must be seen to be believed. These streams, and the gorges through which they run periodically, form the chief bar to progress in this region.

We had got an idea that we should descend into a land, if not of milk and honey, at least of good grass and some sort of shrubs and trees, perhaps, for fuel, with plenty of game for the pot. But we were badly mistaken. Grass was, except in one valley into which we later moved our base, almost entirely absent; our fuel consisted always of burtzi root, and even that apparently ubiquitous plant sometimes failed us, and the game was very rare owing to the absence of grass. We were soon to find out the error of entering a land of which nothing was known, relying partly on pony transport instead of wholly on porters. When discussing matters with Mason in 1925, I had asked what would happen should conditions prove unsuitable for ponies. Mason, however, relied on Wood's dictum—he being the only explorer who looked into Valley 'H'—that the country appeared suitable for ponies. One might naturally suppose that, if the upper reaches of a valley are ice-free and suitable for pack transport, the lower reaches will present even less difficulties.

But that again proves the impossibility of trying to forecast anything in this country, where streams perform 'S' turns and one never knows which way they will run next—any way except uphill and sometimes apparently that!—and where an open valley at 18,000 ft. may become an ice field at 16,000 ft. Such was our experience.

On July 4 we paid off our temporary transport, which started at once to Panamik, leaving us with our 18 ponies (3 having died out of our 21) and 24 porters—a good many of whom were required for the carriage of survey instruments.

The base camp was situated within a mile of where the valley hit the afore-mentioned line of peaks (the 'Tiddlers') and swung westwards and then N.W. Another valley from the E. joined valley 'H' shortly before camp. Clifford, who had ridden some miles down the valley, returned in the evening with the report that, five miles down stream, the valley appeared blocked by a large glacier, descending from the S., behind which a lake had formed. We were not amused, and began to unpack Alpine equipment and the collapsible boat—an old and leaky structure which the Joint Commissioner for Ladakh had lent us

On the 5th we all rode down the valley and reached the obstruction. As we rounded the last corner before the glacier we were met by a truly wonderful view. A mile of broad, stony valley led to a lake, about 2 miles in length and half a mile broad. At the far end of this was a wall of ice, some 200 ft. high—the flank of an immense glacier, the surface of which was a mass of towering séracs. In the distance—away down the Shaksgam—rose the massif peaks of the Gasherbrums.

The lake was partially frozen over still, giving it a white appearance, which earned for it the name of Kyagar Thso, 'the grey-white lake,' from our Ladakis. Such names as we gave tentatively throughout the exploration were those bestowed by the Ladakis according to some natural feature which struck their imagination. Mason hopes that these names will be officially adopted by the Survey of India. The glacier was named the Kyagar glacier.

The formation of the lake is a matter of some interest. It is evident that it has a small outflow at its W. end, forcing its way under the glacier where the latter abuts against the N. wall of the valley—the Outer Aghil wall—under the 'Tiddlers.' But during the flood season a vast quantity of water comes into the lake from the glaciers of the Upper Shaksgam. The lake rises and spreads backwards up the valley. In the winter it freezes, and with the spring thaw the surface ice remains in huge blocks perched up on the shale slopes. Some of these blocks were many feet in thickness; both sides of the lake and the shale slopes for some way back were covered with blocks. The height to which the lake rises each year is clearly shown in the shale slopes by ridges made by the ice, the slopes being covered by these ridges. It is evident that in some years the lake rises nearly to the height of the glacier and extends backwards for some 6 miles from the glacier. As water does not begin to flow into the lake until about June, the outflow has time to take off a large quantity of water before it commences to fill up again.

Leaving our ponies at the lake, we scrambled along the N. shore amidst the ice blocks until we reached the glacier. Actually to get up into this was none too simple. A huge sérac had fallen from the side of the glacier at the corner of the lake and formed a somewhat unstable bridge. However, I considered it my duty to see at once whether it would be possible to get porters across this part of the glacier, so crossed the bridge and scrambled up between séracs on to the surface of the ice. Never have I seen such a sight. From the surface

of the glacier rose tier after tier of immense séracs, one interminable chaos of huge towers, through which it would never be possible to construct a satisfactory line of communication for porters. So that was that.

The following day Mason commenced the survey of the side valleys leading into the Shaksgam, the Khan Sahib making a plane table station at about 18,000 ft. in the neighbourhood of the base camp, from which station most of the country could be seen.

Cave and I moved a light camp down to the lake in the morning and ascended a small hill, about 17,500 ft. to the S. of the lake, to get a view of the upper reaches of the Kyagar glacier. Shortly before reaching this hill, as we rounded a shoulder, we saw what I suppose was the finest spectacle which can be imagined. There burst upon our view the huge majesty of K², rising cloudless and peerless into the sky—40 miles down the valley. But this was not all, for in succession, closer to us, rose Broad Peak, all the Gasherbrums, and lastly the particularly beautiful and comparatively close summits of Teram Kangri. Southwards lay the Asparasas group, and from this group, first in many large ice streams and then in one immense frozen river, descended the Kyagar glacier.

We could not see the actual snout of the glacier, but far below us there emerged again the middle reaches of the Shaksgam valley, into which some ten miles further down another huge glacier could be seen protruding, and then yet another, below the Gasherbrums, probably the Urdok of Sir F. Younghusband.

The mystery of the valley now lay explained. Sir Francis, from the stream, looking up the valley, saw only glaciers. Possibly he saw the Kyagar, possibly only the next one down the valley from us. In any case it would have appeared to him that these glaciers formed the head of the valley and the source of the Shaksgam. He was not to know that the valley extended many miles E. of the furthest glacier he could see—an unnatural phenomenon. Similarly Wood, looking down from 'Pass G,' could only see 'an open valley.' He was not to know that it took a right-angle turn, and that round this turn these huge glaciers descend into and block the valley. We now had the ocular proof that the apparently different valleys of those two explorers were in reality one and the same. We took photographs, built cairns for survey points, and examined the glacier below us. This latter appeared to be some 2 miles broad, and for some 5 miles up from its snout was of the most chaotic nature imaginable. It was not crevassed, as ordinary

glaciers, but the weight and vast quantity of ice descending from its main three parent glaciers, when squeezed into the 2-mile trough, force the whole surface up into a chaos of huge towers. We did not notice their size until the following day. To the N. lay the long line of the Outer Aghil range, forming the N. wall of the Shaksgam valley—the 'Red wall.'

On July 7, a day Cave and I shall never forget, we left camp at 6 A.M. with some porters and Rifleman Telakbahadur. Passing our furthest point of the previous day (Shaly Col), and leaving the porters here to build more cairns and wait for our return with food for us, we ran down 1500 ft. of shale to the glacier, and put on crampons. This was Cave's first introduction to serious ice work. From our reconnaissance overnight, we had worked out a possible line across the glacier, but not until we were embarked on it did we realize the immensity of the towers of ice. Some were huge stable blocks, others pinnacles rising to the thinness of a needle point 200 ft. high. Direction was hard to keep, as one could see no landmarks against this labyrinth. The hoped-for passage was impracticable—we would work a few hundred feet through the labyrinth and then be forced southwards up the glacier for some distance. At length we were actually forced back towards the home shore, but then struck an open run of ice—a passage about 80 yds. broad, covered in débris, lying between the central portion of the glacier and another confluent of which we now caught sight, coming in from the S.E. Here—4 miles up from where we began—we stopped at 1.30 for a meal. The surroundings were wonderful, huge towering pinnacles of ice from which depended enormous icicles, blue caverns as large as Pullman cars, and bottomless pits into which thundered glacier streams—otherwise silence, now and then broken by the reverberation of some falling sérac.

Leaving Cave and Telakbahadur to follow, I pushed on up this hummocky passage for another mile. Here at least was a porter route. At 3 P.M., if we were to get back by dark, I decided it was time to turn. A final view from a neighbouring sérac gave me the impression that another half mile would end difficulties, that this passage would lead me to more open ice, whence a central promontory of rock—part of the Asparasas group—might be gained and from which the remainder of the glacier might be crossed above this chaos. Unfortunately we were never permitted to confirm this idea, though both Cave and I wished to do so. Retracing our steps we followed this passage down the glacier and were delighted

to find that it led us to the edge of the ice—5 P.M. We were now getting tired, so I sent Telakbahadur ahead, to go down the moraine and reach Shaly Col as quickly as possible, so as to prevent the porters returning to camp with our food.

Unfortunately there was neither a valley between moraine and hillside nor a proper moraine, and in one place we were forced out on the glacier again by a sudden perpendicular face of ice which abutted against a cliff. By 6 P.M. we were nearing the foot of the shale slope and took it diagonally. We could only manage a few feet of the slipping surface at a time and eventually arrived, nearly exhausted, at Shaly Col as the last rays of the sun were leaving the top of K². It was 8 P.M. and no sign of porters. We met these, however, a bit down on the camp side—had tea, and reached camp at 10.20 P.M.—16½ hrs. with hardly a rest.

Next day, a note from Mason arrived, in which he said that, in view of the difficulties of this glacier route, he thought an easier way might be found by crossing the Aghil range into Wood's 'I' valley, and thence working westwards to strike back in the middle Shaksgam below these glaciers. So Cave and I returned to the base. Meanwhile Clifford had found a way up on to a glacier—the Lungpa Marpo—which lay hidden in a side valley running into our valley from the N. not far below the base camp, and at the top of which there should be a pass into 'I' valley. On July 10 he and I started at 6 A.M. to reconnoitre this glacier. Mason and Cave moved down to the lake to complete the survey work there and to survey by photo-theodolite as much of the middle Shaksgam as could be seen.

Crossing the stream a mile below camp, we soon reached the side valley and the snout of the glacier in it. A passage between a large sérac and the rock wall, discovered by Clifford previously, led us to the right lateral moraine, and by 10.20 we were on nearly level snow-covered glacier at 18,500 ft. and stopped for a meal. To the N. lay an easy pass level with us, and to this Clifford, with Kunchuk (our head porter and shikari), now proceeded. To the W. lay a snow col at the head of the Lungpa Marpo river, which I hoped might lead over behind the 'Red Wall' to another valley, which might break S. again through the wall at a gap we had noted from the Kyagar glacier.

With Rifleman Tekhbadur and a porter I set off for this col, hoping to rejoin Clifford at the breakfast place by 4 P.M. Finding hidden, but small, crevasses, we roped and mounted

by slope and plateaux to the col, which we reached at 3.40 P.M. This was probably the *highest point* reached during the expedition, as the Khan Sahib later computed it to be 20,300 ft. We had left our coats at the breakfast place as the day had been hot, but here on the col a bitter wind swept over us, chilling us to the bone, but by crawling under a boulder photographs could be taken (though into the sun) and chocolate and tea partaken of. The view was most impressive. From our col dropped a fairly steep snow slope to a glacier below. Across this glacier rose the northern slopes of the Outer Aghil wall—peaks of 22,000 ft. here—and between the gaps in this ridge could be seen the long line of giants—K², Broad Peak, and the Gasherbrums. This was a unique view, and I much regret that neither Mason nor the Khan Sahib was able to visit the col for topographical purposes. We did speak of the Khan Sahib and myself coming up later, but, as so often with us, it was a case of 'man proposes,' etc., though I do not think that the Deity can be held responsible for abandonment of some of the plans made!

The snow slopes falling to the glacier below would not have been pleasant for the porters, nor was it possible to see what happened farther down, as the glacier wound out of sight some 2 miles westwards. But I should have liked to have been given the opportunity to explore it to ascertain whether we could break back through the outer wall. The foot of the glacier must have been in the neighbourhood of the gap seen from the S. side.

At 3.55 P.M. we commenced to return from the col, and there followed for me the eight worst hours of the expedition. The cause of my undoing was traced by Clifford to a bad tin of potted meat, of which he, Cave, and I had partaken overnight. Clifford felt ill in the morning, and being a doctor, was able to apply immediate remedies. Cave spent the next day in bed, and the poison chose this unfortunate hour to start reacting upon my digestion. I soon realized from unmistakable and violent symptoms that something was 'wrong with the works.' Added to this, the snow on the glacier had softened, and the 4 miles to the breakfast place was one series of sinking in, knee and waist deep, often with a leg through into a small crevasse, and having to be dragged out on the rope. At length we passed the breakfast place, where there was no sign of Clifford, and got off the ice on to the moraine at 7.30 P.M. Here Clifford had left two men with the tiffin basket, but an effort to drink and eat merely produced vomiting and increased

weakness. So down the moraine we hurried at such a pace as darkness would permit. After many falls and rests by the wayside, we reached a little cliff above the Shaksgam stream and by pure luck struck a slope down which we slid to the water—now in several channels and rushing knee-deep. With linked arms we crossed safely and wended our weary way to camp at 10.40. I found that Clifford had only been back an hour and was pretty done up. I spent two days in bed ‘getting the works right again,’ but didn’t mind much as the weather was none too good for the next few days, causing Mason some delay over his photo-theodolite work.

On July 15 Mason, Cave, and I moved down to the lake again, the former to complete the survey work there and I to try a hopeless-looking gorge which came down into the N. of the lake from behind the ‘Tiddlers.’ I went a short way up it during the afternoon and got into difficulties at once with unpleasant rocks. Next morning we all left at 4.45 A.M. for our different jobs. I took Tekhbadur and a porter with me, but we were back in camp by 7.15. The gorge was hopeless for porters, and bad enough for a roped party. We only got up a few hundred feet. When Tekhbadur remarked ‘If anyone falls here, we shall all be for it,’ I thought it about time to recognize defeat—this not being a climbing expedition.

After a meal and a rest, we started off again at 10 A.M. with two additional porters, bedding, etc., retraced our steps to the Lungpa Marpo glacier, halted to collect burtzi roots, and finally made a bivouac by 4 P.M. well up the moraine, at about 17,800 ft. The object of this journey was to cross the col which Clifford had visited with Kunchuk during a reconnaissance on the 10th, and if possible descend it northwards into ‘I’ valley (Lungmo-Chhé). The porters afterwards named the col the ‘Marpo La’—‘Marpo’ meaning ‘red’—from an unmistakable red cliff near the summit. Starting next morning with Tekhbadur and a porter at 6.15, we crossed the pass at 7.45—height about 18,500 ft. and very easy going. At 8 A.M. we reached an outcrop of moraine on the N. side and left warm clothing there. Below us we could see a jumble of séracs, but by hugging the left bank of the glacier we soon got on to a comfortable moraine, and by 9 A.M. were parallel with the summit of the glacier. It appeared as if there would be no difficulty in descending into ‘I’ valley, and I spotted a likely camping place some 1000 ft. below and sent the porter to reconnoitre farther down ‘I.’ We could see two large glaciers, mentioned by Wood, coming down into the valley farther E.,

and above there appeared a green patch which must be grass. Here was a good spot to which to shift our base.

Tekhhahadur and I, keeping to the 18,000 ft. contour, traversed the shaly hillside, heading for rocky mounds from which I hoped to see up the main (N.W.) branch of the head of 'I' and to get a view of the glacier at the head, round the snout of which Wood had promised us an easy pass similar to 'G.' By 11 A.M. we reached our objective, close to a large glacier, which had every appearance of blocking this N.W. branch completely. The bottom part was a mass of séracs, but higher up, close to our mounds, was an easy way up on to the flat glacier above the séracs. This was all we had time to find out, and being now midday, we had to hasten back. We met the porter, who reported no difficulties below, and crossed the Marpo La in good time. By 3 P.M. we were making tea below our bivouac place, and 5.15 saw us back in camp, able to report an easy passage into 'I' valley for our porter transport.

It was now decided to abandon any attempt at a direct descent of the middle Shaksgam and to transfer our base to the head of 'F' valley. This was made the more imperative by the lack of grass for our ponies, who were daily getting weaker. Clifford and Cave were to take the ponies back over Pass 'G,' feed them on the grass of the Yarkand valley as they moved down to it, and then move up 'I,' as Wood had done in 1914. Meanwhile Mason and I were to cross the Marpo La with the porters and as much kit as could be carried and start a system of transport going to fetch over all necessary stores.

During the next two days most of our base camp stores were moved to the snout of the Marpo glacier where a dump was formed. On July 20 the move began. Clifford and Cave left at 8.30 with the 18 ponies, now so weak that they could only carry grain enough to see them round into 'I,' and were useless to help shift anything in the nature of real loads round to the new base.

Mason and I moved up to 'the green lake'—a little tarn amongst mounds near the dump, after building a wall round some foodstuffs and extra equipment which it became necessary to leave at the old base until they could be fetched in September.

On the 22nd some further survey work was done and the first lot of loads sent up to the edge of the ice—above my bivouac of the 16th—under Tekhhahadur, who knew where a safe place for a camp could be found there. On the same day we moved up to the camp and got up a lot of stuff. On the

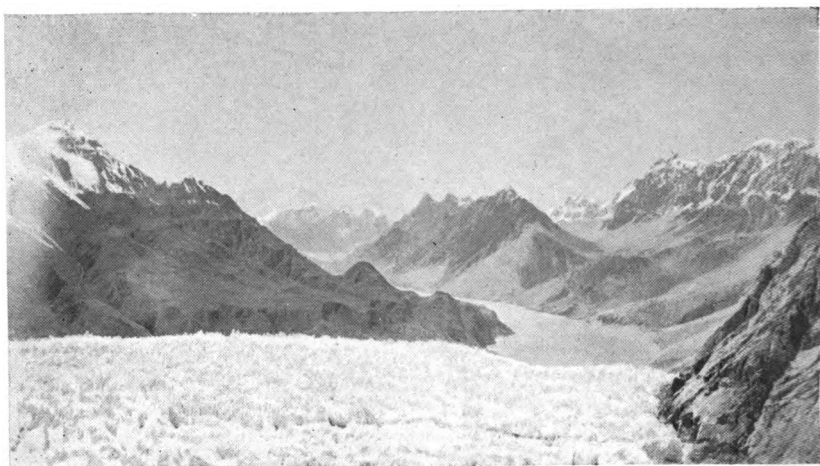


PONY IN CREVASSE at 19,000ft.



Phots. H. D. Minchinton.

AGHIL PEAKS, 23,000ft. RIDGE.



LOOKING DOWN KYAGAR GLACIER.
In background K², 'Broad' Peak and Gasherbrum.



Phots. H. D. Minchinton.

THE ACTUAL SOURCE OF THE SHAKSGAM RIVER.

23rd we crossed the Marpo La, and whilst the porters descended to the selected camp site at the head of 'I,' Mason and I and the Khan Sahib followed the same route as I had done on the 17th, and reached the first glacier at the head of the N.W. branch of 'I' at noon. We got up on to the ice and crossed some two-thirds of the glacier—flat going, snow a bit soft, and a few crevasses. From here we could see a second and parallel glacier, a mile ahead, which came in from the S.W. and joined the one we were on about a mile down from where we were. The two made below their junction a mighty sea of séracs, forcing themselves tight against the cliffs on the opposite side of the valley, and sending a snout down S.E. into 'I' and another N.W. into a valley, the trend of which lay N.W. as far as we could judge.

Coming back to dry land, we next reconnoitred the snout of the glacier, round which Wood had promised the 'easy way.' We were doomed to disappointment—there was no way for ponies past the snout, the terminal séracs of which merged into the opposite valley-side. We followed the stream from the glacier down for some 2 miles and reached camp, which was pitched on an old lake bed, formed by the damming of the stream by a glacier which lay half a mile below camp, the snout of which was now well back from the valley floor.

This new base was at 17,200 ft. That day we despatched men back over the Marpo La, and the transfer of the remaining stores began—it took five weeks to complete! Mason and I made a trip some miles down the valley to see if a gorge just below camp, reported in 1914 impassable for ponies by Wood, would still prove so, and also to ascertain how far it was down to grass and burtzi. The gorge proved passable, and grass and fuel were located some 4 miles down—we spent a pleasant day taking things easily and collecting butterflies and fossils.

Then followed a reconnaissance over the Tuni glaciers, the Sa-Kang La (Pass of snow and mud) which we crossed, and looked down into the Sa Lungpa or 'Valley of Mud,' as the Ladakis named it. Neither of the glaciers presented much difficulty and we worked out a line for ponies and left Telakbahadur to cut a track up on to the first glacier. What intrigued me was the fact that this new valley appeared, some few miles down, to turn W. and cut right back towards Aghil wall—the central wall now—S.W. back towards the Shaksgam. It appeared to us as if there was a narrow gap in the 'Red Wall' but we could only hazard a guess as to whether it was our new valley cutting through, or another valley coming towards us

into this one. We made a different line back over the W. glacier, crossing amidst incipient séracs just above its junction with the E. glacier.

Two days later Clifford and Cave brought in the ponies. We had begun to get anxious, as they were two days over the anticipated time, but the necessity of giving the ponies grass when found had delayed the arrival, and even so, 3 more ponies had died *en route*. The remaining 15 were now much fitter, and we left them at grass below the gorge, together with our 6 remaining sheep. The party brought a welcome addition to the larder—2 antelope and 2 burrhel, which soon vanished amongst our 40-odd persons in camp. Mason now decided to push on over the 'Tuni glacier' and down to Sa Lungpa. He was optimistic about getting back to the Shaksgam by this route, but decided that, owing to lack of porters and the quantity of stuff still to be brought over the Marpo La, Clifford and Cave must remain at the new base in support. He hoped that we should be back in ten days, and that the base party would be able to join us earlier. Actually our 'advance party' was away five weeks from the base, which proved the most arduous time both for us and for those in support. On July 29 we sent off 12 porters during the afternoon to sleep at the edge of the southern Tuni glacier, following ourselves at 4 A.M. on the 30th with the 4 strongest ponies. By 5.45 A.M. we had the ponies up on to the flat glacier, loaded them up and crossed it in $1\frac{1}{2}$ hrs. with only a little difficulty getting off, where a passage had to be cut in the ice. The second glacier, reached in another hour, took twice as long to cross, as the sun was softening the snow, and in one patch of some 300 yds. the ponies went in up to the withers, necessitating manhandling their loads and digging them out continuously. A few small crevasses had to be probed for before we got the ponies and porters safely off the second glacier at 10.15 and halted for a meal.

Then commenced the descent down a stony and steep ravine to the Sa Lungpa valley. This small valley must surely be the most desolate spot in Asia. Some 5 miles long, flanked on both sides by steep rock and ice-clad peaks, the valley bottom itself and lower slopes seem composed of dried grey mud, and during the ten days we spent in that little valley the sole vestiges of life seen were 2 snowcock and 1 fly—the latter was found inside my tent and had probably come over from the base camp in the rolled-up tent. Nor was there a sign of vegetation—no burtzi, although we were down to 16,000 ft.

Our march down the valley brought us to what we named 'the pony camp,' being the farthest point the ponies could reach. Poor beasts—the Sa-Kang La was really too much for them, and they only just got back to the base alive—we had taken them, loaded, over two glaciers of nearly 19,000 ft., on starvation rations, and they did wonderfully well.

On arrival at the 'Pony Camp' Mason immediately set off to explore 'the gap' at the entrance of which we were now camped. Our Sa Lungpa certainly broke through the Outer Aghil wall here, and we hoped to follow it through, with the further hope that it similarly broke through the Outer wall back to the Shaksgam. Mason's exploration was short-lived, as he found that the going became impossible within $1\frac{1}{2}$ miles of camp, where the stream dashed through a gorge. What he could not see was that the gorge, at the entrance of which he stopped and which he thought ran only for a short distance, in reality extended for several miles. This melancholy fact disclosed itself to me from a hill, 1500 ft. above camp, to which Tekhbadhur and I repaired when Mason set off down stream. On this hill we built 'Tekh's cairn' which served as a good survey station later. From the cairn the view down the gorge was most impressive. The stream, after cutting through the central wall and its ramifications, appeared to strike against the back (N. slopes) of the outer wall and turn left-handed—north-westwards. Beyond the outer wall we could see the Gasherbrums towering loftily. I am of the opinion that it does not break through, but again swings N., and is the self-same river that we were to meet three weeks later, vastly increased by streams from many glaciers. The streams in this region think nothing of boxing the compass on frequent occasions, during a few miles' course.

To the N. of our hill lay another valley, which joined the Sa Lungpa about $\frac{1}{2}$ mile below us, and the view in this direction led me to believe that we should have some prospect of success in pushing up in that direction. On August 1 Tekhbadhur made further survey cairns on a col of hard grey mud above camp, while Mason worked out latitudes and other problems. The following day Telakbadhur and I discovered an interesting fact whilst following the left side of the N. valley at a high level. We crossed the grey mud col, dropped down to the gorge below, hoping to find a way up it, but could not actually get into the gorge, being stopped by a waterfall. Ascending to the col again, we kept along the 17,500 ft. contour over shale slopes to a yellow mud col over a spur, dropped 500 ft. and rose

the same to another grey mud col. On a spur near this we built a small cairn and found several fossils of small shells. It was wonderful to think that these fossils, now 17,500 ft. above sea level, had once lain on the sea-bed. From this cairn we got a good view up the remainder of this valley. We could see that the gorge ended below us and that the stream did then become a practical route; that we could get down the shale slopes ahead to the stream without difficulty and that, some 2 miles farther up, the stream divided. The N.W. branch was a violent torrent, red in colour, flowing from a glacier the snout of which was covered in red-coloured moraine. The glacier appeared to be about 5 miles long, and at its top lay a high but apparently easily reached snow col. But it was the stream coming down the N. branch which really intrigued us. Whereas the N.W. stream was turbulent and red, the N. one flowed placidly and was blue! This to my mind could only mean that the N. branch did not flow from a glacier but from some other purer source. This small stream appeared into view from round a corner, so we could see nothing more than the first 200 yds. of it, which was tantalizing. We got back to camp at 4.15 p.m. with 15 fossils and a route in our pockets.

The next day was an anxious one. For two days we had had next to no fuel—cold meats, except for tea. We used our invaluable 'Meta' to keep the camp going with hot tea, except for which the men were able to cook nothing. During the afternoon 8 porters with burtzi arrived, so we were able to arrange to push on instead of retreating. Most nights lately a little snow had fallen, but the days were mostly wonderful, and some good survey photos were taken. The Khan Sahib, of course, was out every day working from some hill-top with his plane table—he was never idle.

On August 4 he started with a minimum of porters up the N. valley to the junction of the red and blue streams now established 'Clean and Dirty Water Camp'—'Dirty-Clean' for short. Thanks to Tekhbahadur, an easier way over the second Sa-Kang La glacier had been found and 5 ponies arrived with loads of burtzi and rations for the men. We were not travelling by any means 'light,' not nearly as light as we might have done, considering the paucity of porters and that we were engaged in a 'push.' It became necessary to take two days over each move from now onwards, there being insufficient porters to carry everything on our journey.

On the 5th Mason and I started at 7.45, and reached 'Dirty-

Clean' at 1 P.M. Whilst waiting for porters to arrive I went a short way up the 'Clean' branch and saw no difficulty for the first $\frac{1}{2}$ mile at all events. The Khan Sahib was busy surveying on a hill immediately N. of the junction and made his station at about 18,500 ft.—2500 ft. above camp. Close to our tents was the first small patch of grass we had seen for days, and a few flowers, amidst which a 'Bee Hawk Moth' and a few butterflies flitted gaily—a cheering spectacle which seemed to announce the proximity of greater verdure—even possibly 'Durbin Jangal' not far distant as the crow flies—which reminds me that some choughs accompanied us from camp to camp throughout the five weeks. We christened them 'George' and 'Mary'; occasionally they brought along a friend or two as well. The Khan Sahib returned at 3 P.M. and confirmed what I had conjectured, that the 'Clean' branch is the N. branch, the 'Dirty' is the Westerly.

On the 6th Mason and I started at 5.45 A.M., he to explore the 'Clean' branch, and I to try to reach the same col at the head of the 'Dirty' branch. Taking to the shaly hill N. of camp, I passed the Khan Sahib's station at 7.15 and mounted by an easy ridge and patch of névé to a snow-capped peak—about 19,500 ft.—which I reached, with Telakbahadur, at 8.15 A.M. The view was wonderful. To the S.W. and S. lay the walls of the Aghil ranges in serried rows—glacier-covered summits and bold spires running up to 23,000 ft. Almost due S. could be seen Teram Kangri and the Asparasas group. But the most extraordinary prospect lay to the N.E. Instead of further serried rows of peaks lay a totally unexpected barren plateau of some 30 square miles extent—a replica of the Depsang (so that we later naturally called it the Aghil Depsang). Evidently once a vast ice cap, the glacier has retreated from its centre, leaving huge snouts projecting miles out into the plateau, like the bodies of gigantic dragons descending from the surrounding peaks.

There is a legend that an army of Kalmuk Tartars once invaded Ladak from Chinese Turkestan, finding a way from Khufelang through this region, and then over some pass in the vicinity of the Urdok glacier. One of our objects was to search for any trace of this ancient route, and it seemed to us that any such army must have crossed this plateau.

At the same time as I was regarding this new phenomenon from on high, Mason was crossing the snowless col at the head of his 'Clean' branch and setting foot—perhaps the first human foot—on the plateau. Far to the N. lay a vast range—

probably the Kun Lun. Our col lay still a long way off, so we could not stay long on this hill top. A long run down névé and shale took us to the edge of the glacier, from which the 'Dirty' stream emanated. We struck it about 2 miles below the col, and were soon plodding carefully up the snow-covered surface, roped, as there were several visible, and invisible, crevasses. At 11.30 we halted at an outcrop of rock for a meal, then headed for the left bank and kept up this towards the col. Before reaching the latter we struck right-handed up a farther snow slope which took us to a snow summit to the N. of the col—about 19,800 ft. The view from this summit was even finer than from the previous one, as K² now appeared through a gap in the Aghil wall, some 20 miles away, soaring upwards into the sky. Below, westwards, lay a glacier, winding out of sight, but which did not appear to have great difficulties for porters. N.W. lay a deep barren trough, at the end of which lay a broad, barren valley in which a river flowed. It was hard at this distance to determine which way the water in it ran, but it appeared to me to run northwards. The 'trough' ran up N. of our summit to a gap in the walls surrounding the Aghil Depsang, and I felt sure a way could be found from the Aghil Depsang over the gap and down in the 'trough' or narrow valley. Having reached this summit at 12.50 P.M., we commenced the return journey at 1.5 P.M. in softening snow, but were off the glacier at 2.30, and, after cutting over a rocky spur, kept down the left bank of the glacier to camp, which we reached at 4.45—a good day's work rewarded with some unsurpassed views.

The following day we moved camp a 3½ hrs. march on to the Aghil Depsang, sending back the porters in the afternoon for the remainder of our things, as we were now always forced to do. Owing to the shortage of fuel we had been unable to have hot water for a bath since leaving the base, and in a mistaken desire for cleanliness I had, two days before, bathed in a glacier stream, with the result that I was somewhat unwell for the next few days. Even the short march to the Aghil Depsang was trying, and after tea I had perforce to do a 2-mile walk after some antelope, as we were in sad need of fresh meat. I was rewarded with a bag of two stray females—the porters had to eat their share practically raw, as we again failed to find any burtzi here.

Mason ran into two coveys of sandgrouse, amidst which he did great execution, and put our minds at rest regarding the fresh food problem for some few days. The trouble was to

cook anything. We managed to dry moss, and add a little antelope dung, which made some sort of a fire. The 'Meta' was kept in reserve as long as possible. The grass on this large plateau was so scarce that it barely supported half a dozen antelope, and after taking toll the first day, the remainder became very wild and unapproachable. On the 9th the Khan Sahib took a light camp to the E. end of the plateau and surveyed a large portion of country. The plateau is evidently the real head of Wood's valley 'J.' He placed the head much farther E., having no idea of the existence of this plateau phenomenon.

On the 10th we moved up a ravine towards the gap I had seen on the 6th as leading westwards over into the trough. We made camp at 17,700 ft. at the foot of a small glacier leading to the gap. This was a bitterly cold camp, bounded on one side by a névé edge fringed with icicles and on the other by a small stream, the water of which would freeze when taken out for the morning ablutions in a tin basin—so the ablutions became somewhat sketchy.

On the 11th we reached the gap in an hour over easy glacier. The gap was at about 18,700 ft. and Mason made a station 200 ft. above it. He thought it probable that, had the Tartar army come in this direction, they must have passed over this gap. The ravine we had come up was therefore christened the Tartar Lungpa, and the gap was the Tartar La, descending from which was the deep trough or Kalmuk Lungpa, into which a steep line of descent down some slopes was evident. We spent 5 hrs. at the station and noticed for the first time the Central Asian haze—the 'Loess' haze—which began to obscure our fine view of K² and other peaks. We found, close to camp, several apparent traces of gold amongst the stones, and powdered the latter to carry back. The weather was rather troublesome, and from that cause and lack of supplies we were forced to remain idle in camp for some days. We ran out of tobacco and tried Ladaki coolie tobacco, which our porters had, and moss—not a very pleasant mixture!

On the 13th Tekhbahadur and I visited another gap more to the N., proving it to be an alternative route to descend into the Kalmuk Lungpa. From this gap we traversed a small peak of about 19,500 ft. and descended to the Tartar La to join Mason and the Khan Sahib surveying there. Two porters were despatched down on to the Kalmuk Lungpa to look for burtzi and anything else they could find, and great was our joy next day when they returned with burtzi, twigs of bushes,

and flowers. Were we really going to descend to vegetation, and might it not possibly be to Durbin Jangal?

Our porters were now strung out all along the L. of C., fetching burtzi which had been sent to the 'Pony Camp,' and going back to the base with letters of instruction for more supplies. Clifford and Cave were having an arduous time at the base. They had been left with 12 porters to get the stores over the Marpo La, but the constant necessity to use most of them to send us up burtzi and food in response to piteous appeals much interfered with their work, and a few men were also unfit to work now and again, further curtailing their few remaining porters.

Whilst waiting to collect our full 12 men again we began sending loads over the Tartar La, and it was not till the 18th that we had sufficient men and supplies to push on. On the 19th we crossed the Tartar La, descended 3000 ft. by steep slopes to a little stream, and at 1 p.m. reached a little patch of grass in which grew flowers which our 'scouts' had brought back—rather like the Dove and the Ark. Mason was keen to get right down to the junction of this stream with the main valley which I had seen on the 6th—another 3 miles or so, so we set off again at 2 p.m. Shortly after this I spotted a herd of burrhel high up a side nullah, and set out on a long stalk as we badly needed meat. After a 2000-ft. climb I got my 'meat' and decided to cut across country to where the camp should now be pitched. After dropping another 3500 ft. and walking 2 miles along the stony valley bottom I arrived at the junction of the valleys at dusk—to find no camp! A weary tramp up stream again—cheered by a beacon lighted on a mound to guide me—brought me, at 8.15, very tired and hungry, to where camp really was. Mason had found the porters too tired to go on, and camp had been pitched within a mile of where I had left them at 1 p.m. Anyhow, 'meat' for some days lay on the hill above and was fetched in next morning, after which we moved down to 'Junction Camp.'

The next day the chief event was hot baths—our first for five weeks! We also explored a mile up stream, but the going got too bad and we had to return. The stream we had now found was really no stream, but a roaring river. In the mornings it would be 200 ft. broad, running in channels, towards evening it would fill the whole 800 ft. breadth of its bed, and we could hear huge boulders being carried down. It must have been very deep by the evenings and quite impassable at any time of the day in its present swollen condition. We



Phot. H. D. Minchinton.

FROM 19,800ft. ABOVE 'DIRTY' GLACIER.
K² and 'Staircase' Peak.



AT POINT 19,500ft. LOOKING S.



Phot. F. Cave.

GASHERBRUM 'BROAD' PEAK AND K².



Phot. H. D. Minchinton.

LOOKING UP KYAGAR GLACIER.
Asparasus Group, 23,000ft.

had left our boat at the Upper Shaksgam, but it would not have availed us and would have been dashed to pieces. Mason was at first convinced that this was the Shaksgam again, and that we were camped at Durbin Jangal and that a few miles up stream would take us to the Gasherbrum glacier. I was always sceptical and in my diary of 22nd have given my reasons against it being the Shaksgam. My reasons were :

(a) That although there is a lot of water, there is not as much as I should expect to find in the middle Shaksgam in August, after it has received the large streams which must flow from the Urdok and other vast glaciers.

(b) If it is the Shaksgam, then the Aghil pass must lie where we could see the river turning W. some 6 miles farther down, and it would be impossible from such a position (the supposed Aghil pass) to see the snout of the Gasherbrum glacier (which Sir F. Younghusband saw from the Aghil pass), owing to the bend of our river a few miles *up* stream ; our height, at the junction, was still over 14,000 ft., where Sir Francis gives Durbin Jangal 12,300 ft.—too great a discrepancy for permissible error.

Unfortunately this was correct, and we had to content ourselves with the discovery of a large tributary to the Shaksgam, into which it must run some twelve miles farther W.

On this day we moved camp 6 miles down the river, nearly to the point at which it swung due W. Unfortunately, we could not see round the bend, but everything pointed to our being within a few miles of the true Durbin Jangal. After two nights here, during which the river suddenly rose an extra 5 ft. the first night and fell 10 ft. the second, we decided to return to the base in Valley 'I.' We had shot our bolt. The strain was telling appreciably on some members of the party, the porters were showing signs of exhaustion, and our L. of C. now lay through 60 miles over three passes. Neither Clifford nor Cave having had previous experience of snow-work, bad weather on the Sa-Kang La might have meant a complete cessation of supplies from the base, with disastrous results.

On the 24th we went back to Junction Camp, whence the Khan Sahib went a day's march up the river until unable to proceed by an impassable gorge, and definitely proved that it was not the true but the 'Zug (false) Shaksgam.' Although the few days here at 14,000 ft. had been comparatively hot, it snowed that night, and we saw autumn conditions commence.

On the 26th I took a light camp back to the grassy patch—'Green Camp'—to look for fresh meat, but saw no game.

Mason joined me on the 27th, and on the 28th we moved the whole camp to the top of the Tartar La. Here we camped for the night at 18,700 ft.—our highest camp—with the object of seeing sunset and sunrise on K², and a cold night was well rewarded. We were awake an hour before dawn lest we should miss one second of the wonderful spectacle. Whilst the Gasherbrums were still clothed in blackness, the summit of K² became first white, then pink, and lastly golden, looking as if it belonged to another world. From the Tartar La, I took a high level route over a little snow col of about 19,400 ft. by which I reached the Aghil Depsang an hour before the remainder of the party, and was able to obtain a last view of K²—I hope not for ever.

The next day we did a double march—to 'Dirty-Clean' in the morning, and thence to the 'Pony Camp,' which we reached after dark. We had hoped to find the water in the Sa Lungpa much less by now, but to our disgust it was higher than when we left it three weeks ago. The Khan Sahib had told us that in Hunza the year before the rivers had begun to fall by mid-August, so we had entertained ideas of making another attempt to force the gorge below the 'Pony Camp.' I think the late spring snowfall may have kept the rivers at flood level to a later date this year. As this attempt could not be made, and as it looked stormy, we hastened up the Sa Lungpa next day and camped below the W. glacier. On September 1, using Tekhbahadur's route over this glacier—a great improvement on the previous route—we were able to get off the ice of the E. glacier by 2 p.m. With less surface snow the glaciers were much easier than five weeks previously.

During our absence the base camp had been moved 4 miles down Valley 'I,' where an excellent place had been formed. We reached this at 4.30 p.m.—completely surprising the other two, who did not know that we were on the way back.

We learnt, then, something of the difficulties which the supporting party had experienced in keeping us supplied. Not only were they always short of porters to get the stores over the Marpo La owing to having to keep men going and coming over the Sa-Kang La to the Pony Camp, but the large sérac at the far end of the Marpo glacier, just above the dump between which and the rock wall lay the somewhat precarious passage, collapsed early in August and made the transport of stores even more difficult. But in spite of all difficulties, and of short rations themselves, they kept us well supplied—though sometimes the supplies arrived, through no fault of theirs—

at the very last moment, when another day without must have meant turning back.

The next day was spent in resting, bathing and darning. The Khan Sahib was impatient to be at work again, however, so on September 3 Cave, he and I with 2 porters started at 8 A.M. for a certain col N. of the camp, and marked on Wood's map at over 19,500 ft.—about 3000 ft. above camp. We reached it at 11.30 by a torrent bed, shale slope and finally 1000 ft. of steep frozen watercourse, in which we had one *mauvais pas*. From the col a *névé* stretched northwards, interrupting the view which the Khan Sahib required to fill in a blank space between 'I' and 'J.' So we tackled a little rock and snow peak E. of the pass, the summit of which we reached at 1.30 P.M., finding by the Khan Sahib's calculations, and much to his and Cave's joy, that we were at over 20,000 ft.—though Mason, upon our return to camp, thought the Khan Sahib might be over-estimating it. A wonderful 2 hours were spent here—the highest survey station of the expedition,—and then we descended to the col. At one point we had to descend steep rotten rocks very carefully—moving one at a time. This little difficulty took some time for the five of us to negotiate, but 4.45 P.M. saw us back at the col for tea, which was followed by a 1200 ft. slide and run down scree. We were back in camp at 6 P.M.

Two days later we all rode up 'Two Lake Valley' S. of camp. This valley had been previously mapped by Wood, who showed a rock wall at its far end, blocking a possible easy route into the Upper Shaksgam. Clifford and Cave, from the new base, had explored this (as well as in other directions)—[if the word 'exploration' is allowed, as Survey tenets apparently lay down that nothing counts as 'exploration' unless a reliable map is brought back]—and reported that no such wall existed, but that a glacier blocked the descent on the S. side. This error was now corrected, the 'wall' removed from the map and the glacier put in, which certainly formed an efficient barrier for ponies at least to cross by that route. From a hill near by Clifford and Cave had a good view down the Upper Shaksgam to the Kyagar glacier again, and reported that the lake had greatly increased in size and now stretched a good 4 miles up the valley. In this little valley are two small tarns—one of which is a beautiful azure blue, the other grey—hence its name of 'Two Lake Valley.'

Between 'I' and the Upper Shaksgam lay a blank space on Wood's map, which he had hoped Mason would be able to fill

in. This area might have been reached by going up one of the long glaciers coming into 'I' from the S.E. for a few days. The Khan Sahib, Cave and I would have liked to explore these glaciers and fill in the 'blank' during the remaining two weeks to be spent in 'I,' but the opportunity was not given us, and the space still, unfortunately, remains blank.

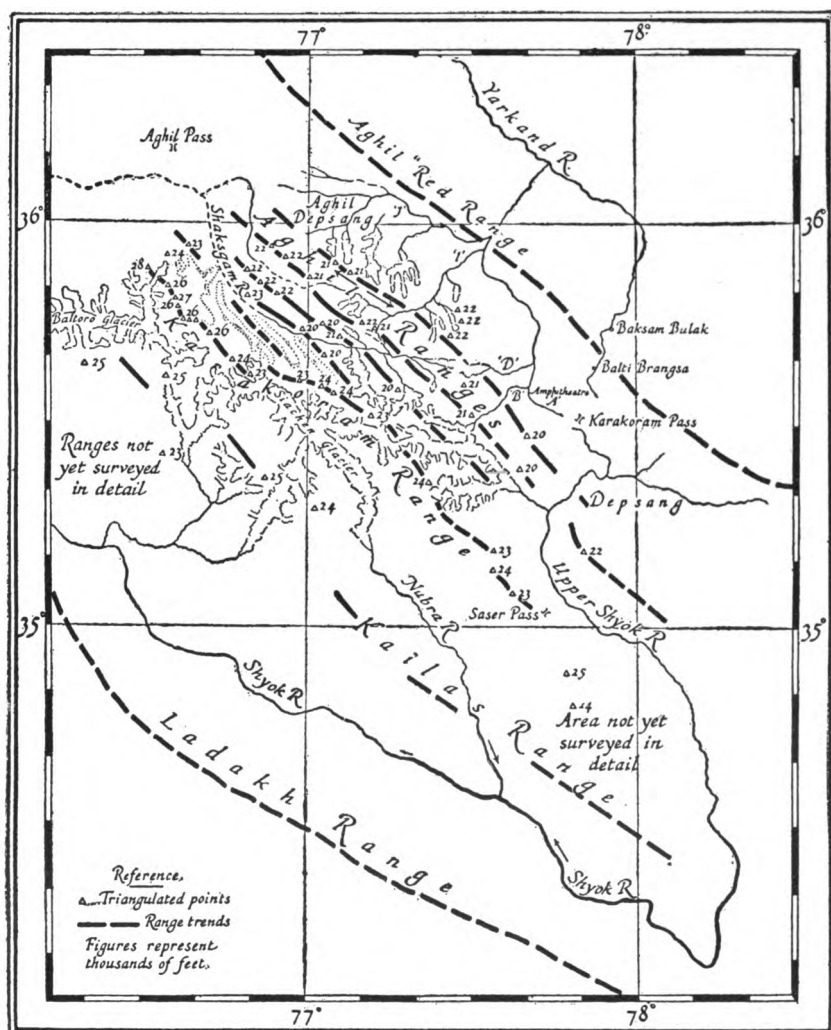
Days of visiting easy cols (mostly rideable to within close distance of their summits) alternated with days of ease or shooting. On the 6th Mason, Cave and I moved a march down the valley to camp at the foot of these cols, which lay on the N. side of the valley. Clifford and Cave had crossed one during August and descended into 'J,' and the topography of the locality required some rectification. Cave and I also ascended a small valley on the right bank—looking for burrhel—and 'removed' another rock wall shown at its head [finding the glacier also different from what the previous map had led us to expect].

Clifford joined us on the 10th. His pleasure did not lie so much in visiting high—or low—cols, but in collecting botanical and geological specimens, and I understand that his collections have furnished valuable information and are well worth the labour he put into the collecting of them. Similarly with Cave's birds, of which he obtained at least one specimen of every bird seen, a great achievement. He often won my admiration by sitting in his cold Whymper tent at the end of the day, with gloveless, freezing hands, skinning specimens, whilst the rest of us were sitting well-begloved round a lamp in our mess tent.

On the 18th the move 'home' began. The remaining 15 ponies went off back via the Yarkand and Pass 'G' to the Upper Shaksgam to fetch the foodstuffs which we had dumped there. We made a short march with the porters towards the Yarkand river. Two days were spent here whilst the porters carried down the rest of our kit, which procedure had to be followed as we moved gradually up the Yarkand river towards Wood's 'Amphitheatre,' where transport from Panamik was to meet us on the 25th. These days were distinguished by very cold winds and some snow at night, the beginning of winter in these inhospitable regions. Our own ponies were caught near Pass 'G' by a bad snowstorm, which we only felt lightly in 'I,' and 3 more died—leaving only 12 of the original 21.

On the 22nd we had our only serious accident. We had collected some specimens of copper ore from a little outcrop

of rotten rock close to camp. It looked very like gold, and in the evening Telakbahadur climbed up to get some for himself.



The rocks above gave way and fell on top of him—resulting in a fractured skull and other less serious injuries. We did not think he would survive the night, but thanks to Clifford's skill, and his own thick Gurkha skull, he did so. This

complicated transport arrangements, as he had to be carried for several days on an improvised blanket stretcher, often in bitter weather, before he was fit to ride a pony, which he could manage just before we reached Sassir Brangsa.

On the 23rd we reached our old camp above the 'amphitheatre,' being gladdened by the arrival of the Panamik transport—29 ponies now instead of 150!—and our own 12 back from Pass 'G.' It snowed on and off all 22nd, 23rd and 24th, but on the 25th we started up valley 'A' and camped not far short of the Karakoram pass. Next day we rejoined the trade route and met several caravans, mostly of camels, crossing the Karakoram pass. We lost another pony this day. We camped near Dualat Beg Öldi that night. From here Cave and I had hoped to take the alternative route to Sassir Brangsa via the Kumdung and Aktash glaciers. There were rumours of a lake forming by the damming of the river here, and it was a great pity that none of us were permitted to go by this route and see this phenomenon, never yet seen by a European. A fortnight later the dam burst and a huge flood swept down the Shyok valley and up the Nubra, causing vast damage and some loss of life. But we had luckily passed out of the Shyok valley before then. These floods have occurred at long intervals in earlier history. However, with 'our noses towards home,' as Mason put it, no splitting up of the party or deviation from the most direct—and tedious—route was permitted.

On the 26th we crossed the Depsang plain in lovely, but cold, weather, and reached Sassir Brangsa on the 30th without incident. The Sassir La had fresh snow on it, but it caused us no trouble, and October 3 saw us back in civilization, if it may be so called, at Panamik. Our first act here was to consume enormous omelettes—having had no eggs for $3\frac{1}{2}$ months. Those Panamik eggs were very luscious!

Two pleasant days were spent here, which included a session in the sulphur bath for which Panamik is famous. The bathing arrangements are highly primitive, but we could not resist the temptation of getting really well boiled and cleaned.

On the 10th we slipped quietly back over the Khardong pass, a very easy matter compared with the large caravan and trying snow conditions four months ago. That afternoon we reached Leh and real civilization in the form of rooms in the 'rest house' and tin baths. We received several kindnesses from the people at the Moravian Mission here. A week at Leh was spent in winding up accounts, paying off our splendid porters and pony men, selling off our remaining ponies, loafing

round the interesting bazaars with their quaint folk, and feeling rather at a loose end and bored !

Cave and I had cherished a plan to relieve part of the monotony of the two weeks' march back to Srinagar by a diversion through Seru, but found it better to let the plan drop. On October 17 we left Leh, and taking the normal stages, reached Dras on the 26th, after some very cold marches. From here Cave and I double-marched ahead, as I was expecting my wife to come up the Sind valley to meet me. Leaving Dras on the 27th, we reached Matzoi that night, crossed the Zoji La early next day and camped below Sonamerg at dusk, which enabled us to reach Kangan, where my wife was awaiting us, on October 29. Here we had a delightful two days' rest.

The party reunited again in Srinagar on November 1, where a further short period was spent in writing reports, disposing of surplus and worn out equipment, and the thousand and one matters pertaining to the winding up of an expedition. On November 12 the party broke up, Mason leaving for Dehra Dun and England, Clifford for Lucknow and England likewise, and Cave and myself returning to our respective regiments.

The whole expedition from Srinagar and back had occupied us a few days under six months.

During this period we had covered in distance something like 1800 miles, mostly on foot.

An area of over 1000 square miles of fairly difficult and previously unexplored mountain country had been mapped and a bit more 'sketched' (i.e. mapped fairly accurately). The source of the Shaksgam has at least been definitely placed and the Upper Shaksgam and its branches explored and surveyed. Further, the not inconsiderable masses of the greater portion of the Aghil ranges had been explored and surveyed.

One very interesting point suggested itself—namely, that the Karakoram pass does not lie over any portion of the so-called Karakoram range, but rather over a prolongation of the Aghil range. The Karakoram range proper would appear, both geologically and geographically, to turn S.E. in the neighbourhood of the Sassir La. The mistake, if such it is, may easily be accounted for. Early travellers first crossed the Karakoram pass, to which the name, signifying 'black earth,' was correctly given. The name then became applied in the natural course of events to the huge snow-covered masses extending thence N.W. in the direction of K², so that this range became known as the Karakoram range, though actually the ridge over which the pass crosses has no claim to be

connected with the range of giant peaks culminating in K². The *Geographical Journal* for April 1927 throws much light on this subject.

It was to my mind a great pity that we did not carry out the original intention of descending the Shaksgam as far as the Urdok glacier, thus joining up on the ground with Sir F. Younghusband's route. Owing to the presence of ponies and the lack of grass for them, and to the corresponding small number of porters, this plan would have had certain difficulties, but I have not the slightest doubt that two of us could have carried it out and returned to the base before the waters rose considerably. Knowledge of the great glaciers flowing into the middle Shaksgam, of which we could only see the snouts, would also have been gained.

Mason, however, claims to have done what was required in surveying the middle Shaksgam by the 'Wild' photo-theodolite method, so that the forcing of the Kyagar glacier and the linking up on the ground with Sir F. Younghusband's route would possibly have had more sentimental than practical value, and the plan was therefore abandoned. But I continue to regret it.

I am of the opinion also that to avoid running into difficulties and getting held up by not knowing what lay ahead, longer reconnaissances would have been valuable, involving some days' absence in advance of the 'main body' by certain members of the party, whilst the survey party would have followed up in rear carrying out its work. This might well have proved a saving of time, enabling better preparations to be made to combat what would then have been known difficulties, and thus enabled more ground to have been covered.

This again was made difficult by the shortage of porters, who were all required to shift the main camps and to carry survey apparatus. It was difficult to find any available for an absence of more than a single night, as the ground ahead was rarely known; consequently with the physical difficulties and resulting 'arrangements' troubles had to be dealt with as they were met, resulting in delay at times.

That no small value is attributed by the R.G.S. to the result of the expedition is evidenced by the award of the 'Founder's Medal' to Mason, to whom the greatest praise is due for the preparation of the expedition, on the care and thoroughness of which the ultimate success must so largely depend.

I understand that all the collections made are proving of value, connecting up what is already known of flora and fauna in other districts.

I should like again to pay tribute to Khan Sahib Afraz Gul. If the success of the exploration was in large measure due to Mason's preparations, the palm for hard work 'in the field' must certainly be given to the Khan Sahib, without whom we should have had a far more difficult time on the march, and but for whose hours of labour, on hillside and ridge, the plane table map would have suffered very considerably.

No better 'followers' could have been found than our Ladaki porters, who worked splendidly, and last, but not least, praise is due to our two Kashmiri cooks, who never seemed too tired nor too cold to get us a hot meal whatever the length of march or weather conditions.

On the whole the weather was kind to us ; a few snowstorms, of little intensity, interfered with survey work on occasions, but never really embarrassed our comfort. Of course it was cold—that was to be expected—but the physical discomfort never approached what I had anticipated it might be. Accidents were rare, and excepting the serious one to Telakbahadur, were confined to a few bruised limbs and falls into streams. Health remained excellent, and we returned to Srinagar in excellent physical condition—merely without any surplus adipose tissue !

I do not think the effect of $3\frac{1}{2}$ months at over 16,000 ft. had much appreciable mental effect on us, except the occasional 'growse' of some of us that we seemed to be served with as much physical work as we were capable of performing. Certainly, some of the jolly days and evenings we had in Srinagar after the party broke up, during the few extra days some of us spent there before returning to our regimental labours, must have dispelled the idea of any altitude depression, or other effects.

We undoubtedly became acclimatised to exertion at a fairly high altitude, and increased in powers of going up hill. Cave's improvement was particularly noticeable, and our day on September 3, at the end of our fourth month, 'in the field,' to over 20,000 ft. and back, caused but little distress to any of that party.

Within ten days of the breaking up of the expedition we were all back at our normal duties again.

A word as to the fauna may be interesting. The game was not nearly so varied nor so plentiful as we had hoped with regard to the larder. In many valleys we were astonished at the quantity of game tracks, though we saw comparatively little game. This is accounted for by the paucity of grass, which causes the animals to be always on the move searching

for fresh grass and making numbers of tracks. Tracks were particularly plentiful in Valley 'I' and in the 'Zug-Shaksgam.' In the winter it would appear that Valley 'I' is a sanctuary for all sorts of game—being open, catching the sun and containing more grass than all the other valleys put together. This valley appears to be a wintering place for burrhel, wolves and probably wild yak. Two small herds of kiang were seen, but from the tracks there must be a large number of the animals earlier. There were apparent tracks of these in the 'Zug-Shaksgam' also, though, in spite of the large number of tracks of all sorts, the only game seen there was one large herd of burrhel. Burrhel was the animal most frequently and most widely met with, and afforded welcome meat for those of us who liked it.

The Tibetan antelope appears to range much farther west than previously recorded. They evidently come into the Upper Yarkand valley very early and breed there, as when we reached it at the end of June the kids appeared to be 6 to 8 weeks old. The males were found mostly apart from the females. We found a small herd of females, some with kids, as far W. as the Aghil Depsang.

When we next came into the Yarkand valley at the end of September, the migration eastward had begun again, and we were only in time to catch the tail end of the trek. The males, unlike the females, do not appear to travel W. of the Yarkand river. Antelope makes most excellent eating.

We found hares in most valleys—up to 18,000 ft.—beautiful creatures with long grey hair. More than one was caught by hand when sheltering under boulders. Small mouse-hares were also found. Once we saw tracks of a few wolves (in the Yarkand valley) and traces of a lynx or snow leopard close by.

As I have stated, Cave made a most valuable and comprehensive collection of birds, as did Clifford of flora and minerals. I understand that my small collection of butterflies is of interest on account of the height at which some specimens were found.

Small black spiders, in large quantities, were about the only insect of this kind met with.

We are indebted to the Council of the R.G.S. and to Major Kenneth Mason for permission to reproduce the map accompanying this paper, prepared by the members of the expedition, which will be found at the end of this Volume.—EDITOR.]

NOTE ON MAJOR MINCHINTON'S PAPER.

BY FRANCIS YOUNGHUSBAND.

MAJOR MASON'S Shaksgam Expedition accomplished its main object. It extended the accurate triangulation of the Himalayan region across the main watershed north of K_2 , and it determined the source of the Shaksgam River and its approximate course from its source to the junction with it of the Urdok glacier valley which I ascended in 1889. But, without jeopardizing the main object of the Expedition, the members were not able to descend the river to the Urdok glacier and this evidently caused Minchinton much disappointment. I have looked up the river to their furthest point and they have looked down the river to my furthest point, but we have not actually touched hands. Again, they followed down a tributary—the Zug Shaksgam—nearly to the junction with the Shaksgam, and I crossed it at its junction, but here also we do not actually touch.

There therefore remains an interesting little piece of minor exploration still to be done—a rare chance for a subaltern with a few months leave. In both 1887 and 1889 I was on the Shaksgam in September; and I am inclined to think that that month is the best time to be there, because the water is then at its lowest. I may add that in 1887 I did not use a tent: my men and I slept in the open the whole way from the last village in Turkestan to the first village in Baltistan, namely Askoli. At that season it is therefore quite possible to travel very lightly. A light tent might be taken over the Karakoram Pass as far as may be, but then, for a dash down the Shaksgam, if the worst comes to the worst, it might very well be discarded.

How far the adventurous subaltern should go will depend on time and opportunity, but he should try at least to reach Durbin Jangal and explore from there up the Zug Shaksgam to Mason's farthest point so as to connect up. He should note that the very prominent peak he will see from Durbin Jangal is Staircase Peak and not K_2 , as I thought. (The existence of Staircase Peak was not known in my day, and I presumed therefore that the peak I saw was K_2 .) And he should at all costs rack his brains to breaking point to find words with which to describe what he sees. For he will be in the very

midst of what is perhaps the grandest scenery in the whole Himalaya ; and what we unfortunates who now have to stay at home want is a good description of those glorious mountains and not long and weary accounts of everything else except the one distinctive feature of the region.

I have spoken of exploring rather than climbing ; but there is, of course, climbing *ad lib.* to be done in that region. At Durbin Jangal there is—or was thirty-eight years ago—plenty of scrub for firewood and a fair amount of grass, and from the heights above it must be views of K₂ and the Gasherbrum peaks which must exceed in grandeur anything else in the Himalaya—and therefore in the world—except perhaps the view of Everest from close by it on the southern side which no one yet has seen.

LES ÉCRINS AND MONT PELVOUX.

An unpublished letter from the late Miss Gertrude Bell.

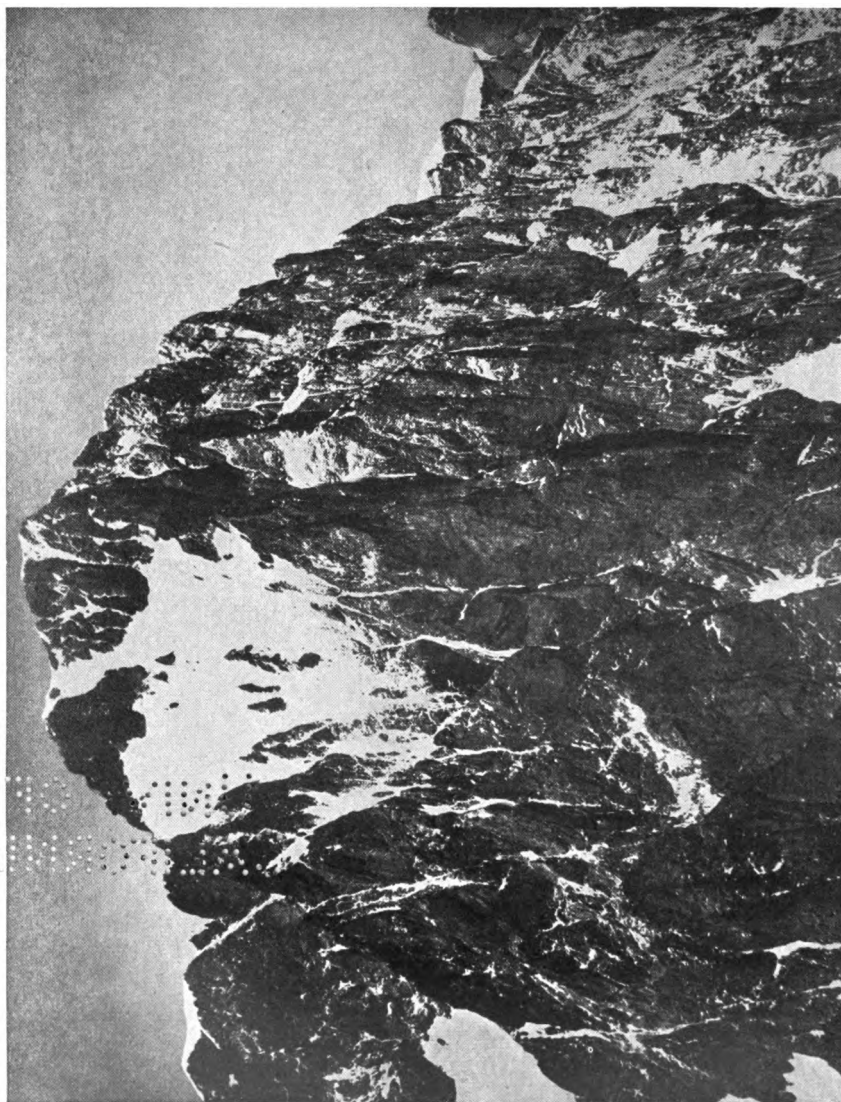
[We offer our grateful thanks to Lady Bell and to Sir Ernest Benn for the privilege of being allowed to publish this letter, which does not appear in 'Letters of Gertrude Bell.'—*Editor, A.J.*]

LA GRAVE,
Monday, Sept. 4, 1899.

DEAREST FATHER,—I have been looking forward for the last twenty-four hours to the moment when I should be able to pour into the ears of my family a full account of my adventures. My tour has been brought to a most successful conclusion, so now for the longest letter in the world ! The truth, the whole truth, and—well, perhaps a little more than the truth, shall we say ! I wrote to Elsa from La Bérarde on Thursday morning.

I spent a peaceful afternoon reading Whymper's terrible account of the first ascension of the Écrins and left about 5 for the Refuge du Carrelet in order to try them myself. We turned up a valley to the right and followed up the stream for an hour and a quarter. The valley was narrow and desolate beyond words, your view headed off in all directions by glaciers. All the valleys on this side of the mountains are wild, narrow and inhospitable, bare of verdure and uninhabited. The Refuge

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Phot. Alfred Holmes.

LES ÉCRINS, S. FACE,
from Pic Coolidge.

stands most picturesquely against a great rock at the junction of two torrents, a wood of rather stumpy fir trees climbing up behind it. It's just like the Châtelleret, but more enclosed by rock and wood. Its great fault is that it stands far too low down.

When I arrived I found Prince Louis of Orléans sitting on a stone watching for me. He had come over the Brèche that day and had heard in La Bérarde of my moves. He looks absurdly young, but he is old enough to be an officer in the Austrian army. He spoke English rather badly, French and German very well, but his native language I discovered is Portuguese. He's nothing of an Alpinist, though he has been at it 4 seasons. He had with him Faure and his son and an English servant, who climbed very well, smoking a pipe all the time! We sat on a stone and talked while Faure cooked his soup, and when it was ready he invited me to dine with him, which, as there was only one saucepan and I should have had to wait some time, I promptly did. *Und wie!* I was hungry. While we were dining my two Germans arrived and proceeded to cut and eat an excellent dinner outside. We sat on rocks and all talked the while, and all exchanged addresses that we might subsequently exchange photographs, for we all had cameras with us. As for the night, *vide passim*, except that I slept soundly and was much annoyed when at midnight the guides began to get up. We drank chocolate and a little before 1 we were all off, my caravan leading. The night was quite clear, but the way up the gorge very dark. We kept our lanterns till about 4, when we got on to the glacier. It was a very long way up through the wood—the Refuge ought to be at the top of it—and then long *éboulis* and *névés*.

The guides went awfully slowly and stopped to rest several times, which was boring. We roped on the glacier, it was precious cold with a wind. Presently the peaks on the opposite side of the valley turned scarlet, but we got no sun until we came on to a snow col between the Écrins and a peak called the Fifre—the Col des Avalanches it is called. An extraordinarily steep slope of ice, which has only been done once, leads down on to the Glacier Noir, and looking over it we saw a sea of soft white cloud beneath us, with the sun walking straight across. We turned to the left, crossed a little schrund and got on to the rock, where we sat down, shaded from the sun but not from the wind, and had a hearty meal. You observe that I have recovered a mountain appetite! It was here that I made the sad discovery that my excellent bottle of fresh lemonade had

been left behind at the Refuge ! The good Germans gave me some of theirs.

It was awfully cold, we didn't linger to digest, but skirts off, and straight up the rock, Mathon still leading. When we were about 10 minutes up Marnis dropped his axe. It fortunately stuck on the edge of the schrund and Prince Louis's porter went down to fetch it. It was a most disagreeable ten minutes. I doubled up and sat on my hands and my feet and froze at discretion. However, the rock soon warmed us. It was very pleasant going, very steep but good rock, not as difficult as the Meije. There was a wire rope on the only bad place, and even that we could easily have passed without any extra help. In an hour or so we turned a corner and got into the sun, which was great bliss. We were far ahead, so we sat down on a little ledge on which Mathon had once passed a night of mist and *verglas* and waited for the others.

Opposite to us, so near that one felt one might throw a stone across, towered the Pelvoux, the Pic sans Nom and the Ailefroide. We started off again, Prince Louis in front, and had a very agreeable couple of hours over ice slopes, awfully steep down, broken by small rocky arêtes. The only drawback was that these were extremely rotten and one had to go with immense precaution, both for oneself and for the others. At one moment, as I stepped on to a rock, away it came and in an instant I was on my back on the ice ; it wasn't at all alarming, because my rope was quite tight, but I cut my finger, and poor Mathon, who was holding hard on to a sharp rock, which broke under his hand, cut himself rather badly. Germany to the rescue as usual. Dr. Pauleke produced a bandage for him and sticking-plaster for me, and we went gaily on. Many photographs were taken at this period. They will be not a little comic. We next came to some long couloirs of bad rock, and this was rather tedious, for the Orléans caravan sent down clouds of stones, so that we had to let them get to the top of each couloir before we started. Then we five went on together. It was very cold waiting. These rocks finally brought us to the summit at 10 o'clock.

The Écrins is shaped like a spoon which has been cut off half-way down the bowl ; we had come up the edge of the spoon on the west and incurved side. The top is a most satisfactory top, sharp and so thin that you can't think how it stands at all. The day was clearer than on the Meije ; we saw the Matterhorn, the Dent Blanche, a whole line of great peaks. We stayed for about an hour and a quarter, ate an enormous

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LES ÉCRINS, N. FACE
from Grande Ruine.

Phot. V. Sella.

lunch, took photographs and slept—at least I did for quite 20 minutes. Then we went off over the top of the spoon and down the other side, which is completely covered with snow leading down on to the great Glacier Blanc, which is the largest I have seen in Dauphiné. The Germans led and had to make the steps down a very long and almost precipitous slope of ice. Fortunately it was pretty thickly coated with snow, in excellent condition, so that there was not much ice cutting to do. Even so we waited three-quarters of an hour or more to give them a start, and I slept peacefully the while.

It took us a good half-hour to get down the first slope (—when I say slope!) of snow, backwards straight down. My left hand, which I had to put into the step above me, speedily lost all sensation, which was rather a comfort, as the feelings it had before enjoyed were not pleasant; but when I came to the bottom I found that three of my fingers were frost-bitten. There are still enormous sore blisters on them. The wind blew merrily and the snow swept round in clouds—it was intolerably cold. However, at last it ended in a great big enormous schrund, and I thought I never should let myself down round the corner of it, but I did after all. I was now in rags, so I put on my skirt for decency—at least Mathon did, for I couldn't feel at all with my fingers (you know this is all quite true!). We went on down endless slopes of ice with a thin coating of snow on them, jumped down two little schrunds (one of which Prince Louis descended on his back, for his porter jumped without giving fair warning). I heard the English servant call out, 'I've 'old of the rope, sir,' in exactly the same voice as he would have said that his shaving water was ready (it sounded so funny); and at last, at last we were down on the Glacier Blanc.

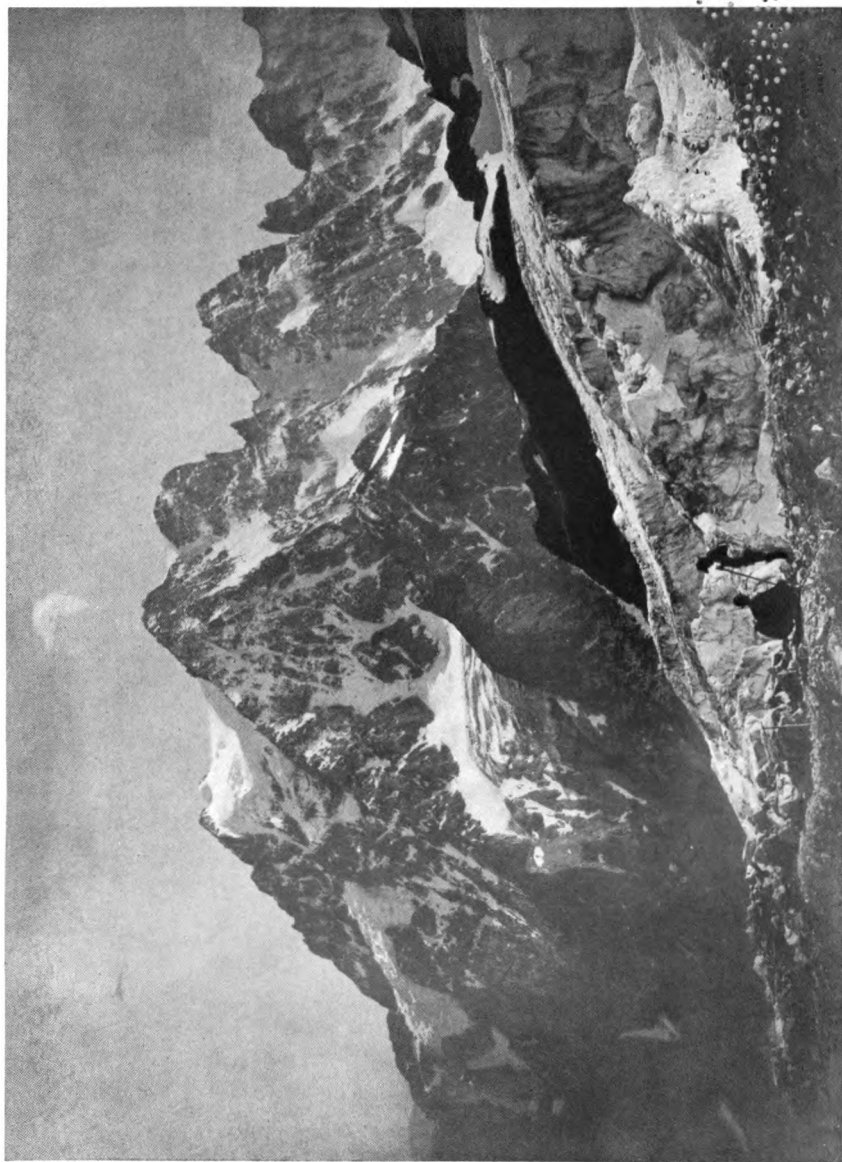
I didn't distinguish myself during that descent. I fell quite flat on my back twice. I'm a dreadful duffer at ice (but rather good at rock by this time!). We found the Germans sitting in the delicious sun, on their knapsacks, waiting for us, and we sat down too in the middle of the glacier and ate up all the rest of the provisions with extreme cheerfulness (but my fingers were painful and rubbing them in the snow torture) and waved our hands to the Orléans party, who came down far behind us and passed over the Col des Écrins at the head of the glacier, making for La Bérarde. We, however, turned to the right down the great glacier between the Écrins and its *contre-forts* and all those peaks and cols of which one sees the other side from the Refuge de l'Alpe.

An hour or so brought us to enormous séracs, where we unroped and tracked down rock and loose stones to the Refuge Tuckett, which is a disgusting little hole. A little lower down Mathon lost the way, and while he looked for it we sat and observed the scenery. (It was quite 5 o'clock by this time.) There is an extraordinary Alpine view here ; I'll try and make you understand. The two glaciers come together at the Pré de Madame Carle, a little oasis of stumpy trees and patches of grass on which stands the Refuge Cézanne, and one is all snow and the other is all stones, the fact being that the line of peaks, Pelvoux, etc., and that side of the Écrins are so steep that there is no place for the snow to accumulate. Mathon found the way and we almost wished he hadn't, it was such a beast—an endless rock, very very steep, there is an enormous drop between the Refuge Tuckett and the Refuge Cézanne.

It was dusk when we got to the bottom ; we marched bravely on through the growing dark over *éboulis* and the rockiest of paths, and my fingers hurt like—no, blazes, I was going to say, but freezes would be better ; and I had hurt my foot on a rock, too, and I can't think why it wasn't more disgusting than it was. We got in at 8, having lighted our lanterns again half an hour before, and I never saw anything more delightful than the open door of the inn. The good Hippolyte Rodier had arrived and advised them of our coming to such purpose that twelve *couverts* had been spread for us ! The shortest of toilettes and then the largest of dinners. We were extremely merry, for we felt we had a real good day's mountaineering behind us ; but it was too long—19 hours, one gets so sick of it. I wasn't badly tired at all, no aches except my fingers, an enormous appetite, and how I slept ! But it's too long all the same. I like the Meije better too ; it's more interesting. Next morning I was perfectly brisk and down to breakfast at 9.30, which I thought a good performance. My Germans were down before me, bless them !

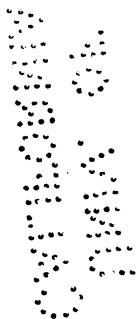
Ailefroide is lovely ; it stands on the tiniest bit of green at the junction of two valleys. The inn (which is much less good than La Bérarde, but not very bad), a church and one or two hovels make up the whole place. There are patches of firs in the fields and climbing up the hillsides. We had a thunderstorm at twelve, but at two it cleared and I decided to go on, Ailefroide not being a place to make a long stay in. The Germans also decided to go.

I started at 3.15 up the other valley, which leads down to Ailefroide—very very steep and narrow and very beautiful.



Phot. V. Sella.

PELVOUX AND PIC SANS NOM.
Séracs of Glacier Blanc in foreground.



We presently turned straight up the hillside to our right and at 6.30 reached the Refuge Lemer cier after a long pull up. It lies almost at the foot of the glaciers of the Pelvoux. I found there two young French officers—I had heard at the inn that they had gone up. One—he was rather nice—came out to meet me and presented himself in great form ; the other was extremely grumpy. He retired at once to bed, I think he had a chill. The Refuge is a good one with a sleeping-room and a cooking-room. Mathon made my soup, and the nice officer talked to me while I supped. It was after dark when the Germans arrived and I talked to them while they supped and then went to bed—on a mattress !—and slept most soundly till three.

This was Sunday morning. The two Frenchmen were off half an hour before us, they went a different way and we never saw them again. They hadn't reached the top when we were there, for there were no traces in the snow. I expect they are still in some couloir. This was a day of illness. Dr. Paulcke had had fever all night ; he started out to make the ascent looking like a rag and turned back after ten minutes. So Lohmüller joined my caravan. There was a most wonderful sunrise on a sea of cloud, all the peaks quite clear. We crossed the tail of the glacier, some stones and some névés, and when we got to the foot of the arête Mathon broke down. We begged him to stop there, but he insisted on coming half-way up and then gave way altogether. So Lohmüller, Marnis and I went on to the top, one and a half hours of arête, quite easy but bad rock, half an hour of very good easy glacier. The whole ascent from the hut was only four and a quarter hours and the descent about two and a half. We came down a tremendous pace, Lohmüller leading and I flying after amidst showers of stones. However, no one was hurt. The rope was pretty much anyhow, mostly between my feet, I think. We found Mathon better and we all returned to the hut together, with good glissades down the névés. Dr. Paulcke was also better. It was perfectly delicious at the Refuge ; we produced all our provisions and had lunch in common, and then I lay on the rocks and slept for an hour. We left at two and I got in at seven, but the Germans stopped by the way and cooked their own dinner out of doors. They came in while I was having mine and we chatted on till nearly nine, when I went to bed. I haven't seen them to-day, for they were not up when I left this morning, and I think they meant to sleep at Le Monétier.

This day, *nämlich*, has been one of the nicest I had had.

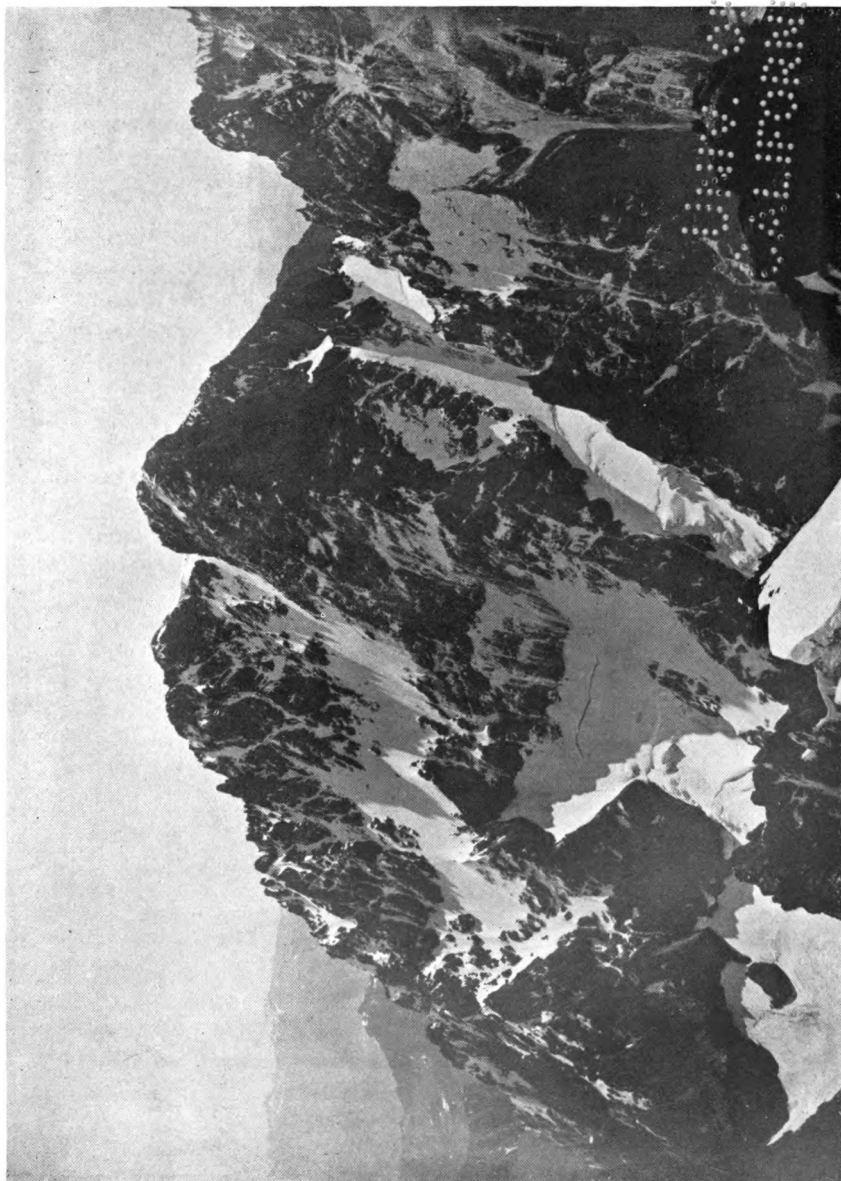
We left Ailefroide at five; the valley got wider and more pleasing as we went down, and it was perfectly charming walking by the edge of the river over grass and through woods. After an hour or so we turned up and over a heavenly little grassy col—the Col des Chaudins. We got to the top at 8.30 and looked all across the Guisane valley, the Galibier opposite and Le Monétier at our feet. The way down lay all through pine woods, too nice for words, and when I arrived at ten M. Izoard received me with open arms. I went down to the Établissement des Bains and had a delicious hot bath—all the people were much excited at seeing me again. Then I had the most excellent lunch—you remember how good everything is there—and left by the diligence at 11.45, getting here at three. Rather a nice old French couple were lunching and coming on here. I have been sitting with them after dinner outside. Two caravans have done the Meije to-day. One consisted of two young Germans without a guide. They sat opposite to me at dinner and told me all their adventures.

Now I must tell you that M. Izoard let the wife of our purse friend know that I was there and she came to thank me for the 100 francs and send messages to you. Izoard then took me to her house to see her children—four of them, two boys and two girls. The youngest boy is a delicate little soul and since babyhood his one idea has been to become a priest. But they can't pay for his instruction. They want two hundred francs to carry them through the next three years; then, Izoard says, they can manage. The little boy stood by with big shining eyes while Izoard told me this tale and the mother, who is a good speechless sort of peasant woman, looking awfully old and worn, wrung her hands and asked if you would help. I talked the matter over with Izoard afterwards and said I would tell you about it. He says they are very decent people and that the money would not be thrown away. The boy has a fixed idea and besides he is too delicate to work in the fields. They are terribly poor—they just keep alive with the hardest work. I arranged with Izoard that if you liked to do anything for them, the money should pass through his hands. It would be rather funny if the end of the purse adventure were to be that you should have added another priest to the world!

I think I'll now finish these few remarks. Goodbye, beloved family.

Ever your affectionate daughter,

GERTRUDE.



Phot. V. Sella.

MONT PELVOUX, N.W. OR GLACIER NOIR FACE.



CHARMOZ AND GRÉPON.

By GEORGE H. MORSE.

I HAVE been asked to jot down some notes on the early history of these two peaks, which are probably the most popular in the Chamonix district to-day and of which some record may be worth preserving in the JOURNAL. I am writing with a certain amount of personal knowledge, but if I have omitted any early ascent by any member of ours or of any foreign club, I am sure that the Editor of the ALPINE JOURNAL would be very glad if it were reported to him.

Up till 1892, when M. Louis Kurz's *Climbers' Guide* to the Chain of Mont Blanc was published, these two peaks were classified as one and called the 'Charmoz,' but there is, of course, a very distinct gap between them, and gradually, at the Montenvers anyhow, the two peaks came to be regarded as separate, possibly because the traverse of the Charmoz can be seen from that hotel, while the Grépon is behind and invisible. Both peaks are similar in character, a rocky ridge with several pinnacles, running roughly from N. to S., and in each case the highest point is the last but one to the S. But the 'steps' are not the same, since you can traverse the Charmoz either way with a 60 ft. spare rope, while on the Grépon at least an 100 ft. is wanted. The gap or col between the Charmoz and the Grépon is now known as the Charmoz-Grépon Col, and is flanked at the top by a *chevaux de frise* of rocky points, a sort of elongation of the Charmoz ridge. The col to the S., or rather S.W., of the Grépon is the Col de Blaitière,¹ and this must be reached if ascending the Grépon from the S.

The usual routes for both peaks are by way of the Glacier des Nantillons, which lies to the W., and both cols are reached by this glacier. To the E. of the peaks lies the Mer de Glace.

The early attempts are difficult to unravel now; they seem to have been mostly directed at the Grépon, but there is no doubt that the spot known as 'C.P.', a little higher than the

¹ This col is now called 'Col des Nantillons' (see Vallot Guide, I, *Les Aiguilles de Chamonix*, 1925, p. 75), but as it was still called 'Col de Blaitière' in Kurz's Guide, 1892, I prefer to retain that name.

Col de Blaitière, was reached many years before the first ascent of either peak. I have been unable to ascertain the date when the letters 'C.P.' were painted, but they are said to be the initials of the guides J. E. Charlet and Prosper Payot, who took part in the attempts made in the early 'seventies. Both were in the conquest of the Petit Dru, but Charlet was not Charlet-Straton at this time (*Kurz*, 3rd Edition, p. 268, footnote). Some height above the Charmoz-Grépon Col was also attained on the Grépon (see 'A.J.' 10, 399, footnote), but I do not think that any attempt got higher than C.P. on the S. side, or the rocks at the foot of the slabs near the 'Mummery' chimney on the N. side, till we come to the ascent of a N. point of the Charmoz by Mummery in 1880.

AIGUILLE DES GRANDS CHARMOZ, 3445 m.=11,303 ft., *Vallot*.

The first ascent of any of the five main points of the Charmoz was made by the late Mr. A. F. Mummery with Alexander Burgener and Benedict Venetz on July 15, 1880 ('A.J.' 10, 95 and 16, 159). They ascended by way of the Nantillons Glacier. Going up the Charmoz-Grépon Couloir for a short distance and passing across the face of the mountain towards the N., they climbed the well-known ice chimney, reaching the gap between the two northernmost points. They first ascended the N. point, 3427 m. (*Vallot*, I., plate, p. 38), and finding it lower than the one to the S., returned to the gap and ascended point 3431 m. It is possible, although uncertain, that they passed this point and ascended the next one, 3435 m., but beyond this they certainly did not go. They returned by the route of their ascent (Mummery, 'My Climbs in the Alps,' p. 96 *et seq.*).

The next point to the S. is now called *La Carrée*, 3439 m., then comes the *Bâton Wicks*, 3444 m., and then some way further to the S. the true summit of the Grands Charmoz, 3445 m., and last of all the S. point, 3444 m.

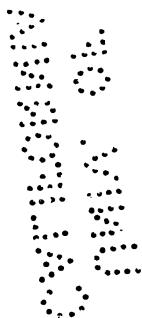
Burgener left his axe on the highest point attained by them, which was not retrieved till 1885 by M. Dunod's party (*Mummery*, p. 110).

The next ascent, and first ascent of the highest point, 3445 m., was made by MM. H. Dunod and P. Vignon with four guides on August 9, 1885, from the top of the Charmoz-Grépon Col, now the ordinary route. M. Dunod appears to have followed Mummery's route some three weeks later, Sept. 2, and retrieved Burgener's ice-axe ('A.J.' 13, 197).



Phot. Alfred Holmes.

CHARMOZ AND GRÉPON.



A further advance was made two years later. On Aug. 9, 1887, Messrs. W. Muir and J. H. Wicks with Emile Rey and J. Fischer followed Dunod's route to the top (second ascent) and, continuing N. along the ridge, made the first ascent of the point now known as *Bâton Wicks*, 3444 m., returning by the way they ascended.

Then, on Sept. 10, 1887, Mr. T. P. H. Jose with F. Simond and P. Burnet followed Mummery's route and made the first traverse of the mountain from N. to S. ('A.J.' **13**, 408).

After 1887 the peak was beginning to get known. I have been unable to ascertain who first traversed it from S. to N., still it was probably done not long after 1888. I was under the impression that Emile Rey, with M. Dunod, was the first to make this traverse. M. Dunod, however, states that he never traversed (Vallot, I, p. 32), so I hope that further information will be forthcoming.

I will add only four more items which may be worth recording. Probably the first guideless ascent of the Grands Charmoz (3445 m.) was made by H. W. Henderson, J. H. Wicks, C. Wilson and myself on August 3, 1889 ('A.J.' **33**, 105).

On July 30, 1890, Wicks, Ellis Carr and I repeated Jose's expedition, making, I believe, the first guideless traverse from N. to S.

In 1892 Mummery records the same expedition (*Mummery*, p. 119) as the first traverse from N. to S. by ladies, Miss Bristow and Miss Pasteur being in his party, while on August 10, 1893, Wicks, Wilson, Kesteven and I with Miss Pasteur and Miss M. Pasteur traversed from S. to N., the first traverse, I think, by ladies in the opposite direction.

I have purposely omitted any new routes found up this peak in later years, such as Mr. Thorold's ascent in 1899, from the E., as they are all recorded in the *ALPINE JOURNAL*, and the Vallot Guide.

AIGUILLE DE GRÉPON, 3482 m. = 11,424 ft., *Vallot*.

The early history of the Grépon is perhaps even more fascinating than that of the Charmoz, partly because it is a more difficult climb, and partly because the Chamonix guides appear to have had superstitions about it.

As in the case of the Charmoz, a minor point was first ascended, the first ascent of any of the Grépon points being made by the brothers, Messrs. Francis M. and Gerald W.

Balfour² with J. Petrus and P. Knubel on July 19, 1881. They ascended the Nantillons Glacier to the Col de Blaitière, and, gaining C.P., crossed the chasm below, climbing to the gap between the highest point, 3482m., and the most southern point, 3475m. ('A.J.' 10, 397). They were unable to scale the highest point, but with difficulty got up the point to the S. of the gap, which is now known as *Pointe Balfour* (Vallot, p. 72).

The next attempt was made by Mummery with Alexander Burgener and B. Venetz on August 3, 1881. Their attempt was made from the N. They ascended to the Charmoz-Grépon Col and went up to the gap in the arête, discovering the 'Mummery' chimney some 20 ft. lower and to the W. of the gap. They climbed this, Venetz leading, and followed the arête to the N. point, 3478 m., beyond which there is a big drop in the arête. They returned by the same route.

They were doubtful whether a point to the S. was not slightly higher (*Mummery*, p. 131), so they returned on August 5, and following their previous route, descended the big drop—the Grand Gendarme of the Vallot Guide—using a doubled rope, and continued to the highest point, which they ascended with difficulty by the famous 'Venetz' chimney on the N.E. side which emerges directly under the summit. The easier way now followed is a few feet on the W. side. They returned by the same way, having made the first ascent of the Grépon, 3482 m. ('A.J.' 16, 166).

We next find M. H. Dunod with F. and G. Simond and A. Tairraz attacking the mountain in August 1885, described in a paper entitled 'A Month on the Grépon' in the 1885 C.A.F. *Annuaire* (see 'A.J.' 13, 197).

Monsieur Dunod's energies were chiefly directed from the S. by the Balfours' route. On the first occasion, having arrived at the gap between the highest point and *Pointe Balfour*, they failed to reach the top; they seem to have recompensed themselves by making the second ascent of *Pointe Balfour*. They appear to have had ladders with them (*Mummery*, p. 135), and on Sept. 2, 1885, they made the second ascent of the highest point, or the first ascent by the S. route.

I think the credit of this ascent must be given to François Simond. The 'Dunod' chimney up which they eventually climbed is not visible from the Grépon-Balfour gap. It lies

² Brothers of Mr. Arthur J. Balfour, now Earl of Balfour, K.G., O.M.

on the Nantillons side and is separated from the gap by a buttress or little ridge running W. from the main peak to reach the foot of which you must descend a small rock couloir skirting the S. side of this buttress. Simond gained a point on the buttress well above the gap, and saw that the way up was by the chimney on the N. side of the buttress, and that the lowest step overhung. By means of an ingenious procedure (of which more anon) he was able to throw a doubled rope over a knob, some 20 ft. beyond him, so that it hung down the chimney. By the help of this they were able to pass the overhang and so reach the summit.

The next attempt was my own on August 1, 1889, with Ulrich and Hans Almer. The Charmoz was then getting talked about at the Montenvers as a good climb, and we knew that Mummery had ascended the Grépon from the Charmoz-Grépon Col, but we had little idea where his chimney was. We were somewhat ambitious and reached the Grands Charmoz top at 9 A.M. Returning to the Charmoz-Grépon Col, it took us one hour to cut steps in very hard ice to the gap near the Mummery chimney. We failed to notice the latter, and spent some time on the E. side looking for it. There we found a couple of plugs of wood stuck in a crevice on a great slab and concluded that there must lie the way. These plugs must have been left by some of the early explorers. From the top of the slab we got with some difficulty on to a very narrow ledge about 10 ft. higher. Hans was then pushed up as far as we could reach; he then wormed up another 12 ft. or so and stuck. He said he might bear off to the left if he could find a foothold. Ulrich was pushed up, and getting below Hans was able to stretch out his left hand and make the necessary foothold. Even then it was touch and go; but Hans slowly moved up, and, getting to better holds, reached the platform above the well-known hole, Burgener's 'Kanonenloch.' With the rope held above, Ulrich soon followed and all was well. It would be difficult to speak too highly of Hans's brilliant rock climbing on this occasion, for it certainly was a very ticklish place and I am not sure that I enjoyed standing, unroped, on that narrow ledge, with the two guides scrambling above me.

The moment Ulrich looked through the hole he pointed to the top of the Mummery chimney and exclaimed that there was the way we ought to have come up. We took it on our descent and found it far preferable to our ascent.

From the hole we traversed at once round to the Nantillons side, and swarming up one of those granite *à chevaux*, presently

got back to the arête. The view down the cliffs to the Nantillons Glacier from this point was most impressive and magnificent, and we duly reached the N. point, as Mummery in his first attempt, at 2.30 p.m.

The plan of carrying ample spare rope was not so much in vogue in those days, and the guides basing the difficulties on those we had passed, decided it was too late to try and go any further. As it was we only reached the Montenvers at 10 p.m.

The third ascent was made by Mr. J. H. Wicks with F. Simond and Zurbriggen on August 9, 1889, by the Dunod chimney. Wicks always told me that on this occasion, when they reached the Grépon-Balfour gap, Simond took him down to the bottom of the Dunod chimney, and told him to wait there till he, Simond, was ready. Simond got his doubled rope fixed fairly quickly, and they then made the ascent. Wicks had no idea how the rope was arranged, and that was the reason of our guideless attempts later.

In February of this year, 1927, Dr. C. Wilson kindly sent me a note-book belonging to Wicks, in which the latter wrote: 'I did not see how the guides got on to the ledge,³ they went together, Zurbriggen being left on it to put the rope as far forward as possible. It must have been fastened firm in some way. When François was up he pulled the thick rope after him and Zurbriggen returned without any rope. Was the ledge³ easy to reach and descend from, or had they a ladder stowed away somewhere on the Mer de Glace side?'

I never saw this note of Wicks's till this year, and it quite bears out what he told me as mentioned above.

On August 1, 1890, Ellis Carr, Wicks and I started off to solve the problem of fixing the rope. Wicks knew the way and we soon arrived at C.P. The plan previously followed there was to leave a short rope hanging N. of the stone bridge; you then descended a little way, using a hand traverse to cross the gap and get on to the peak proper. This route was, I believe, always used till Captain Farrar's descent in 1893. We soon got to the Grépon-Balfour gap, and not seeing any way of fixing a rope, went down the little couloir to the foot of the Dunod chimney, but failed utterly to pass the overhang.

We returned to the gap and proceeded, like M. Dunod, to climb Pointe Balfour, which we estimated as about 15 ft. lower

³ I think that Wicks ought to have used the word 'ridge' or 'buttress' here.—*G. H. M.*

than the true summit. We had our reward, for on the top, looking across at the Grépon, we spied a piton fixed high up on the opposite wall, some 20 ft. above the gap.

This gave us so much hope that we returned to the charge on August 4, and were a very long time in getting to the piton; in fact we only succeeded by one of us going to the end of a wide ledge which lies on the Mer de Glace side just through the gap and is immediately under the summit. We then slung the climbing rope over a small bulge in the rock face, which gave some sort of hand-hold for the right hand. We put the rope through the piton, then doubling it, threw it over a shoulder on the buttress, but although it came to the bottom of the Dunod chimney, it did not hang down the centre, coming instead in a slanting direction from the right and being consequently useless. Wicks was sure that there was something more to be done. It then began to snow heavily, so we gave it up and returned.

Shortly after this Carr went home, and on August 12 Wicks and I determined to try again. We took a porter up to C.P., and, leaving him there, quickly went on to the gap. After some time I managed to get to the piton and threw the doubled rope over the buttress, where it hung as in our former attempt. Wicks then went down to the bottom of the Dunod chimney and held it tight. By its aid I passed up from the piton on to a shoulder in the buttress, and found a nice flat place about a foot wide and four or five feet long. After several tries I managed to throw the rope over the brown bulge at the top of the Dunod chimney and it reached down to just where it was wanted. It was tiring work fixing this rope and we were only two. Wicks being fresher had first shot, but could not pass the overhang; being taller I managed to do so, but unfortunately in my struggles I jerked one of the ropes off the bulge; it flew 20 ft. to the right, and as I was holding both ropes I was gradually pulled out of the direct route. I had to give it up, slid down the rope, and we returned to our porter. Two is not enough for a guideless party by this route.

On August 14, 1891, Wicks, J. H. Gibson and I tried again. It was a very cold and windy day, and we were nearly four hours getting the rope fixed. Neither Wicks nor Gibson managed to pass the overhang, and as it was then past 4 P.M. we thought it prudent to return.

On August 5, 1892, Dr. C. Wilson, C. H. Pasteur and François Simond, who had led the two successful ascents from this side, made the next attempt. They spent three hours

at the gap, but could not get to the piton, so had to give it up and returned. The failure of François on this occasion makes me wonder whether Wicks's surmise about a ladder being there in 1889 is correct or not, or was François anxious not to unfold his secret?

Three days later, on August 8, Wicks having been suddenly recalled to England, Gibson, Pasteur, Wilson and I set off again. We left the hotel at 2.45 A.M. and reached the gap at 8.15. Here we fed, and knowing the tricks of the trade by now, the rope was fixed by 10. We all went to the bottom of the chimney and, one of us putting his whole weight on the rope, to prevent any more jerking off the bulge, pushed Gibson up over the overhang. The fourth ascent of the Grépon, guideless, was made by 11.15. After half an hour's rest, we let⁴ Wilson down on the Mer de Glace face to the wide ledge next to the gap, to see if any route could be spotted on that (E.) side but he reported that it seemed impossible. Wilson sent up his axe, which we left, with a handkerchief attached, on the summit. We returned to the gap, collected our ropes and sacks, and reached Montenvers at 5.30 P.M. The axe did not remain there long, for on August 18 Mummery, Collie, Hastings and Pasteur went up from the Charmoz-Grépon Col and retrieved the ice-axe (*Mummery*, p. 140) and descended via C.P., making the first traverse from N. to S.

This axe has a curious after-story attached to it. Wilson had returned to England before it was retrieved, and Pasteur took it back a week later. The up boat-train stopped for a minute on Charing Cross Bridge, and at the same time a down train, with Wilson in it, stopped also. Their two carriages were opposite to each other. Both happened to look up, so Pasteur passed the axe across, and Wilson took it home.

On August 4, 1893, Mummery, Hastings and Miss Bristow repeated the N. to S. traverse. Three others of their party went by the C.P. route, and Mummery let a rope down the Dunod chimney by which they ascended. First ascent and traverse by a lady.

Then, on August 6, Captain Farrar with Daniel Maquignaz and Christian Klucker followed the Mummery route. The latter's chimney was still rather unknown, and they missed it as I did in 1889. However, they spotted the wooden wedges, and had the same exciting experience as I had in making the

⁴ i.e. by the chimney now called after the guide Josef Knubel.

Univ. of
California



Bâton Wicks.

THE 'BIG DROP' OR GRAND GENDARME

second ascent of the slabs.⁵ They traversed the mountain, and discovered that one could get to C.P. by keeping to the left and passing over a stone bridge. This stone bridge, or arch, was mentioned by the brothers Balfour as affording a possible route from C.P. ('A.J.' 10, 398). This route then became the usual way, as it obviated leaving the short rope necessary to re-ascend to C.P.

Two days later, August 8, Wicks, Wilson and I ascended from the C.P. side, hoping to find a rope hanging at the big drop. We left the Montenvers at 1.35 A.M. and were on the top at 10.10. We presently moved on and reached the foot of the big drop by 11.30. Unfortunately the rope which Mummery had left on the 4th had blown over to the Nantillons side and was jammed, so it was of much less use than we had hoped for, still it helped in the first part of the climb, which is the most difficult. We struggled up and were all on the N. peak by 12.20. We left at 1 P.M., and going down the Mummery chimney reached Montenvers at 8.15, thus making the first traverse from S. to N.

Early in September of the same year, Pasteur, H. A. Beeching, and P. A. L. Pryor, Miss Pasteur and Miss M. Pasteur with Alfred Simond tried from the C.P. side again. Pasteur writes to me that he 'showed Simond how to fix the rope, which he eventually succeeded in doing, but none of us managed to get up after the rope was fixed.'

Further, on Sept. 6, 1893 (Captain Farrar writes to me), the late Mr. Gerald Arbuthnot with Jean and Antoine Maître also missed the Mummery chimney and ascended by the slabs (Antoine leading); they were benighted after completing the ascent.

My early history of the Grépon is finished, having carried it to the same date as the Charmoz. There may have been other attempts or ascents of which I have not heard; still, I think I may add that on July 5, 1894, Miss M. Pasteur, T. L. Kesteven and I with Alfred Simond (who was most anxious to ascend the Grépon) started again by the C.P. route. I made Simond fix the rope, Kesteven led up the chimney, and we were on the top by 10; the first ascent by a lady from the C.P. side. We went along to the big drop and found the hanging rope gone, so returned by C.P.

Two days later, July 7, Simond satisfied his ambitions with

⁵ Now deservedly known as *les plaques Morse* (Vallot, I, pp. 58-9).
—Editor.

Kesteven and myself by leading up the Mummery chimney, and we traversed the mountain, returning to Montenvers in twelve hours.

The later history of this fascinating peak with variations of the two routes above described, and especially the ascent in 1911 from the Mer de Glace side by Mr. Winthrop Young's party, are all noted in the ALPINE JOURNAL and the Vallot Guide, so there is no necessity for me to recite them.

How are the mighty fallen! There is a constant stream *via* the Mummery chimney over the Grépon nowadays, but I believe that few, if any, of the *voyageurs* declare that the expedition has failed to fulfil their expectations, and the Grépon of old is THE Grépon to-day.

[On July 31, 1922, Sir George Morse made his sixth ascent of the Aiguille de Grépon, accompanied by his daughter.—*Editor.*]

ILLUSIONS.

By GEOFFREY E. HOWARD.

(Read before the Alpine Club, May 3, 1927.)

WHEN our Honorary Secretary commanded me to write a paper on what he was pleased to call an abstract subject, my first mental comment was that it was a pure illusion on his part to imagine that the Club likes, or even tolerates, papers without slides. Indeed I have a ghastly remembrance that when once before I essayed something of the kind in this room, while seated nervously during the Presidential preliminaries, my natural agitation was hardly allayed by over-hearing several eminent Members expressing the opinion that papers without slides were a great mistake and calculated to produce the nadir of boredom.

But anyhow, the idea of Illusions in general wove into my mind a somewhat disorderly train of thought on the subject of the remarkable number and variety of illusions connected since the dawn of time with mountains and mountaineering. Undoubtedly there is something about mountains which

stimulates the latent love or fear of the mysterious in every human mind.

History, from the earliest times, teems with mountain illusions, many of which survive to-day among primitive peoples. Even highly cultured races like the ancient Greeks peopled their mountains with gods and nymphs. The Tibetans make the summit of Everest the seat of a hairy demon monster. The Children of Israel obviously had an illusion that it was especially in mountains that holy men could most easily commune with Jehovah. Instances could be multiplied almost *ad libitum* and might well form the subject of a separate paper by an ethnologist.

The Swiss peasant, familiar though he was with his mountains, peopled them with monsters: and so strong was the illusion that even within the last few centuries he was so far convinced of an occasional encounter with a real live dragon, that he would descend with sufficiently circumstantial descriptions of the pterodactyl to enable local artists to engrave lively portraits thereof. Are they not written and portrayed in the Book of Scheuchzer?

And though to an enlightened audience like ours, this seems to be the height of absurdity, can we wonder when men like Lord Rothermere or Lord Beaverbrook, heirs to all the knowledge of the ages, show day by day in their newspapers that any event which is not of daily occurrence in their own immediate environment 'astonishes, astounds and amazes' them—I use their own favourite expressions; that any person or matter which happens to be unknown to them is a Mystery, and any form of social intercourse involving either dialogue or action is a Drama? The Press being excluded this evening, they would probably describe this Meeting as 'Mountain Men's Mystery Meeting: Amazing Drama.' When, I say, matters in the slightest degree unusual impress themselves thus on the naïve and timid minds of men with all the educational advantages of the modern Press writer—can one wonder that in the Boeotian intelligence of the mediæval Swiss peasant or of the remote dwellers in mountain regions in more primitive places to-day, the grandeur and aloofness of the mountains inspired and inspire illusions productive of terror, awe or worship?

Perhaps, at first sight, especially to uninstructed minds, the mountains do give an illusion of aloofness and repulsion, and it may be that they themselves faintly marvel at our passionate embraces, as the maiden who has hitherto considered herself

a singularly unkissable entity marvels at the caresses of a lover. The outside world gazes in faint astonishment at the ecstasies conjured up in a friend by the unevident charms of his mistress. They know nothing of her spell, of the delicious secret places of her heart and soul. These are reserved for the chosen one. And so the mountains, awe-inspiring and even definitely repulsive to the uninitiated, reserve their darling joys for votaries, who, undismayed by the illusion of a frown, woo their mistress with devotion of body, soul and spirit. The black chasm hides a jewelled nook of moss and flowers ; the unclimbable precipice, a perfectly delightful chimney ; the impassable bergschrund, the most cunningly contrived snow-bridge ; the seemingly endless snow grind, the fierce joy of refreshment at the end.

Of the secret pleasures of the mind it is harder to speak. These, perhaps, *are* illusions, but if so they are of the texture which gives us glimpses of the divine. Some are faintly startling, but more are blessed, if momentary, releases from the hard facts of material existence. We have all experienced that strange and stimulating illusion on the summit of a high peak whence nothing meets the eye but snow, ice and rock, that we are in a new world, almost a new planet, cut off from the hurly-burly of the old life. And have we not sometimes, at such moments, stranger, more inexpressible illusions ? Was the ancient belief regarding the proximity of gods and spirits on mountain tops wholly a delusion ? Can we not at least give so much latitude to the feelings of awe which sometimes come to us in the vast loneliness of mountain summits, as to allow us to believe that transcendental minds such as Moses or Elijah possessed could actually commune with the Great Unseen in places where even we, with all our limitations, feel a strange sensation that the mysterious veil which the eye of human reason cannot penetrate is perchance a little thinner than elsewhere ?

Even lower down, lying among flowers of delicious beauty, beside some splashing stream, in the shade of pine or rock, do we not sometimes lose ourselves in a heavenly illusion within an illusion—that those haunts of the plains, familiar, but sordid, garish or hectic as the case may be, have no real existence ; that Fenchurch Street Station, the moving staircase at Oxford Circus, Wall Street, the Moulin Rouge, the Hull Docks, are in fact merely the fantastic imaginings of an H. G. Wells or a De Quincey, born in a lunatic asylum—that life in its exquisite reality is here ? The mountains framed in drifting clouds against the blue sky, the age-old pine slowly growing

to maturity through the years and slowly decaying, the annual renewal of the flowers, the ever-flowing stream, seem at such moments to be the only eternal realities. Men toil and sweat, excite themselves over ephemeral trivialities, collect their little bank-notes, talk endlessly about nothing, and read each other papers to show how clever they think they are. All illusion! The stream splashes eternally down in gentle mockery.

That is why mountains provide the greatest of all recreations, in the literal sense of the word. We return from them not only strengthened in body, but with our minds and souls laved in a beneficent stream of that refreshment which comes from throwing off the illusions which torment and weary, and bathing in those which delight and purify. While this does not vindicate or even excuse the adorable but dangerous practice of solitary climbing, it is certainly one of the causes which adds to the pleasure of being alone. Even the most perfect companions will sometimes choose the psychological moment at which one's mind is caught up on the wings of breathless beauty to indulge in an outburst of awful heartiness. Nor do I for a moment doubt that everyone of us is at times equally guilty. In solitude we can suit our programme to our mood. Sometimes it is sheer delight, suddenly and from shameful reasons of laziness, to abandon the pleasure of conquest in exchange for a bathe or a contemplative pipe. It is unlikely that a party of climbers can ever be simultaneously seized with the same impulse, and, if that impulse is for inaction, that they should all have the moral courage to admit it. How often, on a summit, some of us would choose to spend an hour in silent happiness, but the eagerness of a companion to 'bag another top' is too obviously laudable to be resisted. Indeed in mountaineering it is hard to say whether Mary or Martha finds the other the more irritating. But Martha holds all the cards; she shakes *Ball's Guide* in her sister's face, and poor Mary must abandon her dreams and illusions and get to work again.

Coming perhaps nearer home, I cannot avoid mentioning that touching illusion which steals over all mountaineers as they approach middle age and persists and increases till at last it melts into reality. I allude to the dreadful and persistent illusion that young climbers take the remotest interest in our early performances. Many a strong youth wilts at the words 'I recollect in '89.' There are, of course, notable exceptions. Historic feats of daring, adventure and endurance are eagerly

listened to and always will be ; but the heroes of such are generally the last men to breathe a word on the subject. I refer to the ordinary climber who happened to ascend the Matterhorn a number of years ago. The state of the snow, the personality of the guides, the condition of the hut, while of vivid interest to the man who did the climb in the '80's or '90's, fills the youthful listener with a feeling akin to the depression of the audience of the lady who informs her nieces that in her young days gentlewomen never showed their ankles !

There is another exception. As time goes on, survivors of remote periods become links with the past, fascinating historical survivals. To-day survivors of the great pioneering '60's need be under no illusion. Their remembrances of those days are eagerly sought for and treasured by anyone with imagination and historical sense. And the '70's : what of them ? I think the '70's are hovering in that hush of twilight which precedes the dawn. Happy, hopeful '70's ! Your time is coming. Soon through the dark clouds of illusion will break the glorious sense of reality. Soon, respectful youth will hang upon your lips and treasure your recollections. '80's and '90's, you are still wrapped in your mists of illusion. Be strong to bear it ; and you, young men, be stronger to bear it too ! Yours, O youth, is the greater burden, and for your infinite patience and courtesy, we of the '90's, and even '80's, tender you our gratitude.

It goes without saying, however, that it is the young who live in a complete world of illusion as regards mountaineering. I have far too great a respect for youth to do more than sketch a few of the most prevalent delusions under which they labour. One, of course, is that all guides are super-climbers. How rude is often the awaking ! I remember one instance in my own early wanderings. (There, you see, the 'I recollect in '97' complex is irresistible !) In Granada a kindly Spanish gentleman recommended me a guide for the Sierra Nevada ; honest, attentive, and a marvellous climber. Of the first two attributes, I will say little. Of the third I will only remark that the first time we found ourselves on a ledge—it was under the summit of the Veleta and quite 4 ft. wide—he turned to me with ashen face and shaking limbs with the naïve remark 'I do not love the mountains ; I prefer city life.' After that I preferred to lead.

Continental youth apparently believes that a *Gratwanderung* is mountaineering. Steeplechasing over the greatest possible number of peaks in 24 hours may be an exacting form of

'physical jerks,' but its connection with true mountaineering is about as close as the Lama's prayer-wheel is to the pure teachings of Gautama. Another illusion of youth seems to be that to select the inaccessible cliff face of a mountain, and, burdened with vast stores of ringed pitons, which are, over a period of days, laboriously driven into the rock, to link them by a threaded rope till the summit is reached, bears some relation to climbing. This morganatic union of Vulcan and Penelope may exercise the muscles, but its votaries can obviously only class themselves as amateur steeplejacks, and by the same token not nearly such useful members of the community as those intrepid gymnasts.

¶ In passing, I must remark that there are men and women who have told me that the first hour from the hut gives them an illusion of hell. Stumbling by lantern light up the moraine, face, hands and feet freezing, while the body perspires miserably—half asleep—the digestive organs in perplexed confusion plaintively wailing to their sympathetic and unhappy owners in involuntary borborygmie ejaculations. I cannot agree with these friends. For my part I can find no illusion about this: it is hell!

And lastly there is the passing of a 70-year-old illusion among the public, that mountaineers were strange eccentrics who risked life and limb in the pursuit of nothing! Sane men would climb, gun in hand, to kill living creatures, or would wander in mountain regions to find gold—but for nothing? A foolish form of meaningless endeavour. To-day the illusion is passing—passing owing to two widely different causes. First, the profound impression made on the public mind by the epic of Everest, which at last stirred their imaginations to realize that there is something in high endeavour among mountains even where there is no material reward; and, secondly,—I believe I am right—the enormous popularity of winter sports.

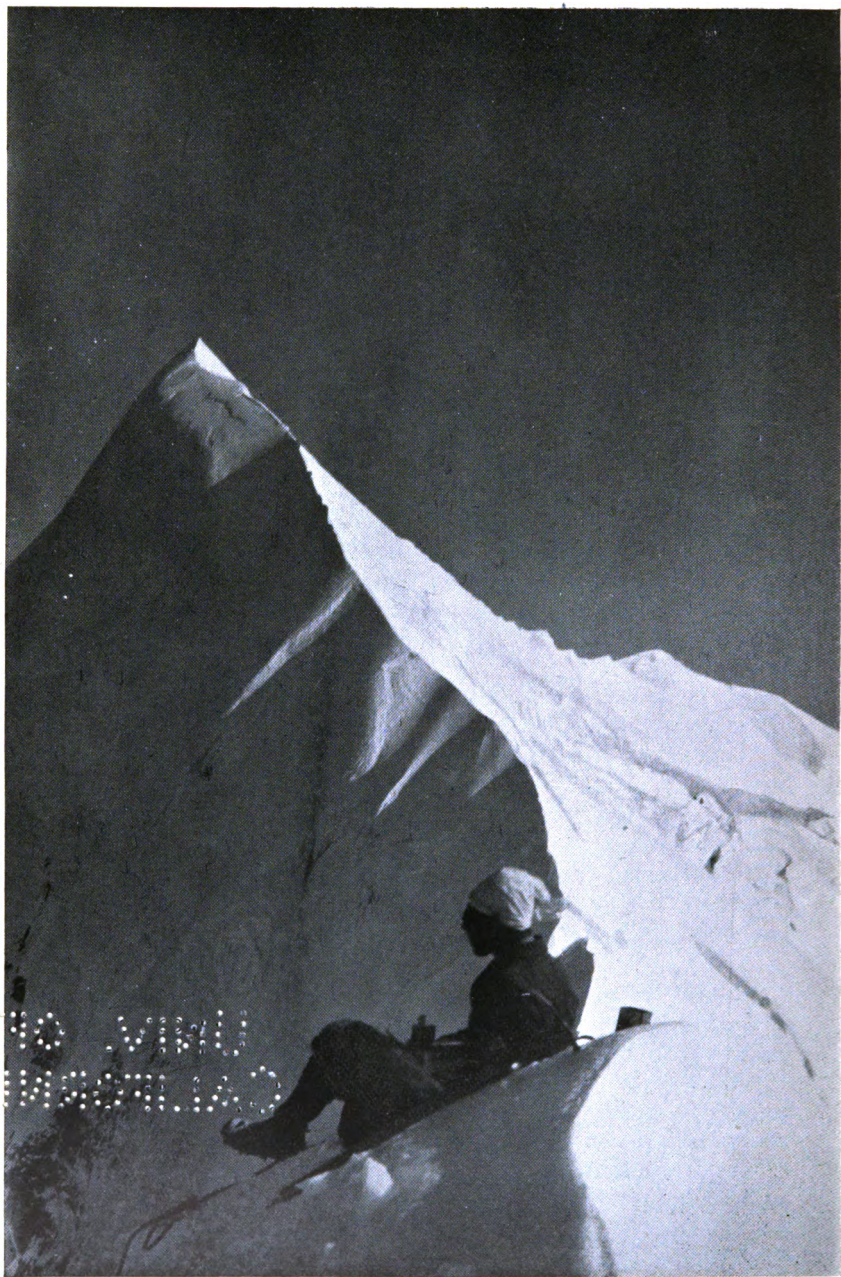
It was the English, with their infinite capacity for the incongruous, who set the example of creating one of the most absurd but productive illusions in the Alps. Realizing the timid and unimaginative temperaments of our great middle-classes whose vision is bounded alternatively by their native suburb and Gleneagles, Bournemouth or Sheringham with an occasional wild and dangerous dash to Dinard, some ingenious persons conceived the idea of luring young men and maidens to the alarming pinnacles of the centre of Europe by creating an almost perfect illusion of home-life in the winter hotels.

Nervous and diffident, these young persons begin to set forth on the novel experiment in little coveys, to discover to their delight that the hotel, the band, and the company are an exact reproduction of their own Wimbledon, Edgbaston, West Didsbury, and all the rest of the dwelling-places of the more solid portions of Britain's vertebræ, with an American bar thrown in. Free from the painful necessity of speaking a foreign tongue or mingling with foreigners, they begin to venture outside into the snow. They come to jazz, they stay to ski, and in many cases, gripped by that strange and exquisite spell which the mountains know how to weave round the hearts of their votaries, return again and again, winter and summer; and in a constantly increasing band of enthusiasts, constitute one of the most fertile recruiting grounds for mountaineers. For do not let us foster another illusion, namely, that ski-ing and mountaineering have little or no connection. On the contrary there is often a true love match between them, and there are few who really mountaineer on ski who are not equally enthusiastic summer climbers. That again is the inevitable spell of the mountains.

Indeed I believe that few Alpine travellers, even among those firmly seated in a funicular, with no concrete vision in their minds beyond a bottle of beer at the top thereof, have not somewhere in a remote corner of their souls an unuttered wish to be up among the snows and glaciers. They will deny it hotly if you suggest it, but it is there all the same, and therefore even funiculars are not wholly to be despised, for in their iron womb is often conceived a passionate longing which is brought forth, nurtured and finally developed into a perfectly matured and completely bald A.C.

But if the public are beginning to take a more intelligent view of mountaineering, do not let us lay the flattering unction to our souls that they are even remotely interested in the small individual achievements of a Whitsun holiday. Here is illusion *in excelsis*! Unless these achievements are unhappily varied by 'The broken leg, the frequent fall,' the newspaper reader turns drearily on to the more earth-shaking topics of Mary Pickford's toilet and Dean Inge's considered views on the Decay of Communism. The precise manner in which Jones despatched himself on Bank Holiday, even though he made the 593rd ascent of Smith's Chimney, on the N.N.W. Buttress of Tryfan, leaves John Bull unmoved. Such efforts to secure a niche in the Temple of Fame are perhaps due to forgetfulness that it is, after all, only a temple and not a skyscraper.

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Phot. H. E. Porter.

THE S. RIDGE OF MT. TASMAN
from the Silberhorn
at 7 a.m.

If there is a universal tragedy of life, it is, I think, that we spend the first half of it in crushing our passions, our ideals, all these delicately illusive emotions, longings and ambitions which are the halo of youth—and we spend the second half trying to recapture them. We are schooled and drilled to believe all such things to be illusions. We diligently pack them away and allow ourselves to be turned into tidy little machines which catch the morning train, perform clerical and similar income-producing functions, make suitable marriages, and compel our offspring to perform the same cramping evolutions. In middle life we shake ourselves—were they all illusions? We are more than doubtful; but, gripped in the vast machinery of convention, we carry on the conventional routine. We turn, however, more and more eagerly to the mountains. There, in solitude, we can nurse our souls back to youth and to the realization of its joys. And I think that to the old, mountains must be the perfect recompense, for even to a very advanced age they can be enjoyed. You take longer to get into training, you can only climb one or two in a season, but once again your body glows with vigour, and you rest on the summit bathed again in the illusion of youth. Turning your eyes inwards you distinguish with undimmed clarity of vision, lighted by experience, between illusion and truth. The trappings of convention fall from your mind; you sort the gold from the dross, and seem to hover in spirit between the real and the Delectable Mountains. An illusion of age perhaps: or perhaps the very essence of Truth. Who can tell?

MOUNT TASMAN AND ITS SATELLITES.

BY H. E. L. PORTER.

(Read before the Alpine Club, November 1, 1927.)

MY first two visits to New Zealand, satisfying as they were, left a large number of objects of desire unattained, by far the most absorbing of which was the queenly Mt. Tasman (11,475 ft.), the highest peak on the main divide of the Southern Alps. Of all the mountains that I have ever seen in reality or even in dreams, Tasman is the most faultlessly beautiful, with the one possible exception of the Weisshorn. Though it has not the latter's pyramidal regularity, it yet displays a curiously

uniform appearance from almost every point of view, a feature which I hope to demonstrate to you to-night : for not only did we achieve our main ambition of getting up Tasman somehow, but, to our great satisfaction, we succeeded in making the first traverse of the mountain, and further stood on all but one of its immediate neighbours, securing fine photographs of it from east and west, north and south, far and near, above and below. From each direction it stands out in unique majesty, draped in a bridal robe of shimmering white, through which the rocky framework peeps out here and there to reassure one that the vision is not merely a creation of fantasy.

The structure of the mountain is simple. There are three pronounced ridges, south, north and west. The S. ridge, after a drop of 800 ft. from the summit, rises 100 ft. to the Silberhorn (10,757 ft.), continuing thence at a high level to Teichelmann and Dampier : from the Silberhorn another ridge falls steeply eastwards to the Grand Plateau, bounding the lower reaches of the Linda glacier. The N. ridge has a conspicuous shoulder 850 ft. below the top, from which it descends gradually to a nameless col 1000 ft. lower. During the season we descended this col on both sides, and, as practicable passes in the heart of the chain should have a name, we have suggested ' Engineer Pass ' as a suitable title, and by this name, for convenience, I shall refer to it in my paper. To the north of Engineer Pass, the divide runs over Lendenfeld and Haast before dropping to Pioneer Pass, one of the three passes so far made between the Hermitage and Waiho. The E. flank of Tasman is a face of contorted ice with but one prominent feature, a rib running up to the N. shoulder, up which a route may conceivably be made some day. The third great ridge runs westward toward the coast for many miles, dividing the basin of the Fox glacier from that of the Balfour, and has some fine peaks on it, notably Torres, Le Receveur and Big Mac. This ridge remains to be climbed, and is by far the most difficult of access of the few remaining great untrodden ridges of the Southern Alps.

The history of Tasman, as far as human feet are concerned, is still very brief. It started on February 6, 1895, when Major E. A. FitzGerald with Zurbriggen and Clarke, then a young porter, ascended it via the Silberhorn after one abortive attempt ('A. J.' 18, 69). They were wearing crampons, except for Clarke, who only had inefficient spikes. This is FitzGerald's summary of the day : ' The time occupied by the ascent and descent was 16 hours. The work of the day had been very fatiguing, as we had been nearly the whole time step-

cutting. Zurbriggen said that he had never known such tail-some snow or ice in Switzerland, or any ascent like this one for almost 6000 ft. on an ice-arête.' Six thousand, I may say at once, is an exaggeration. The point at which the ice-arête is struck is about 8850 ft. : deduct this from the total of 11,475 ft., and the arête dwindles to a mere 2600 ft. After an interval of seventeen years, Peter and Alec Graham conducted the all-conquering Miss Du Faur to the summit on March 24, 1912: success came to them at the third attempt. It was a cold, windy day; the final arête was out of the question, and they went out on the E. face to avoid the westerly gale, forcing a way up to the ridge at a point close to the summit. The third ascent was achieved on February 15, 1913, by Mr. Turner, guided by Peter Graham and Darby Thomson. The first two parties took 16 hours each, and the third 19 hours. All three followed the same route, crossing the Grand Plateau and striking the E. ridge of the Silberhorn half-way up, and then adhering to the ridge as closely as circumstances permitted.

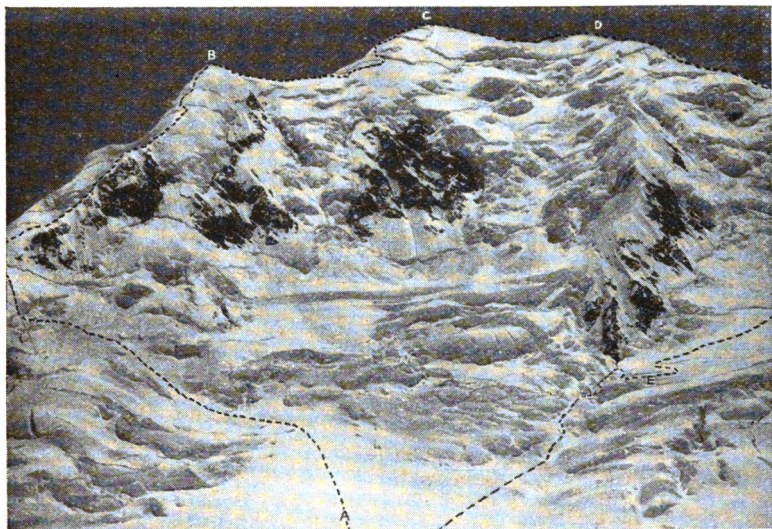
In my previous seasons I had travelled out alone. This year I was fortunate enough to lure Marcel Kurz away from his favourite winter pursuit with the bait of a new mountain range, whereon to feast his cartographic eye. Tasman being our main objective, we went to the Hermitage on December 8, hoping for plentiful snow and small schrunds so early in the season. The weather, however, was atrocious. After one completely wasted journey up the Tasman glacier, we got to the Haast hut on December 18, a beautiful day, only to see the fatal cloud, no bigger than a man's hand, appear in Lendenfeld Saddle within an hour of our arrival. This cloud almost invariably portends a raging nor'wester within 24 hours, and the present occasion was no exception to the rule. We made a desperate bid to scale the Silberhorn next day, before the storm broke, but prudence forced us to retire at 5 A.M. at about 10,000 ft. in the face of furious gusts of powdery snow. The ridge, to my surprise, was in bad order, the ice being overlaid with unattached snow: despite our crampons many steps had to be cut, and we were making slow progress when we retired. In the 17 days before Christmas we only achieved two minor peaks, Sealy and the Footstool. I might aptly compare our efforts during this period to a Shakespearian battle; scene after scene of marching and counter-marching, but remarkably little bloodshed or execution as a result of all the activity. But the knowledge we gained of each other's methods and ideas laid the foundation of our successes in the following weeks, and

incidentally Kurz had a chance one day on the Mueller glacier of showing me how an expert skis.

After Christmas festivities at the home of my future wife, which did not improve our training, we returned with a firm resolve to change our tactics. Before Christmas we had fled from the storm back to the comfort of the Hermitage. We decided now to dig ourselves in, when we got to a hut, and lay regular siege to the peaks of our desire. Pursuant of this resolution, we arrived on January 6 in dubious weather at the Haast hut, and at once the weather-demon, realising that we were not in a mood to be trifled with, placated us with a perfect day on the 7th, a day such as only occurs twice or thrice in a New Zealand season. At 1 A.M. stars were shining through a light mist. We were away at 1.50, and with somewhat creaking joints crawled up Glacier Dome in snow so soft that the crampons on our backs seemed a mere mockery. On the Grand Plateau, however, they were put in their proper place, and worn for the next twelve hours without touching a rock. Following the line we had selected on a reconnaissance the previous afternoon, we steered through the breaks and crevasses of the E. face, till we struck the E. ridge of the Silberhorn at 4.30. An hour later we reached our highest point of December 19, finding the condition of the ridge so much improved that so far we had hardly to cut a step. This was most inspiring, and our knees began to resume their proper elasticity. The schrund near the top of the Silberhorn, which in some years assumes gigantic proportions (two years ago Milne and I had examined it from a distance through glasses, and thought it impassable), fell easily at the first assault. At 6.35 we emerged with delightful suddenness on the delicate cone of the Silberhorn, and halted till 7.10 for a meal and photography. Seen from here, the 800 ft. of knife-edged ice, the straight and narrow road high-perched in space, that leads to Tasman, is a vision to make the heart of a mountaineer thrill and throb with anticipation of battle. It looks appallingly steep, narrow and acute, more so than it is in reality owing to foreshortening, though the reality is grim enough. Miss Du Faur has a graphic account of her impressions of the same scene. 'Naturally,' she says, 'our first thought was for the Tasman arête. With one accord our glances swept it searchingly. The silence that followed was ominous. I felt cold shivers running up and down my spine, as I viewed the last thousand feet of our proposed climb from close quarters. From the Tasman glacier the ridge seems to rise out of the Silberhorn in a gentle, softly-inviting slope. From our

newly-gained summit it rears a knife-like edge for 1000 ft. at the most appalling angle I had ever beheld or imagined.'

There is a descent of just over 100 ft. to the col between the two peaks. Half-way down it we stumbled on a huge unsuspected schrund. We stamped warily down its steep upper lip, and jumped an 8 ft. gap on to a sloping floor of iron-hard snow, the jar whereof unfortunately did some damage to a tendon in Kurz's right knee. Looking up we found to our



Photo, H. E. Porter.]

THE EAST FACE OF MT. TASMAN FROM GLACIER DOME.

(Dotted line shows up and down routes.)

B=Silberhorn.

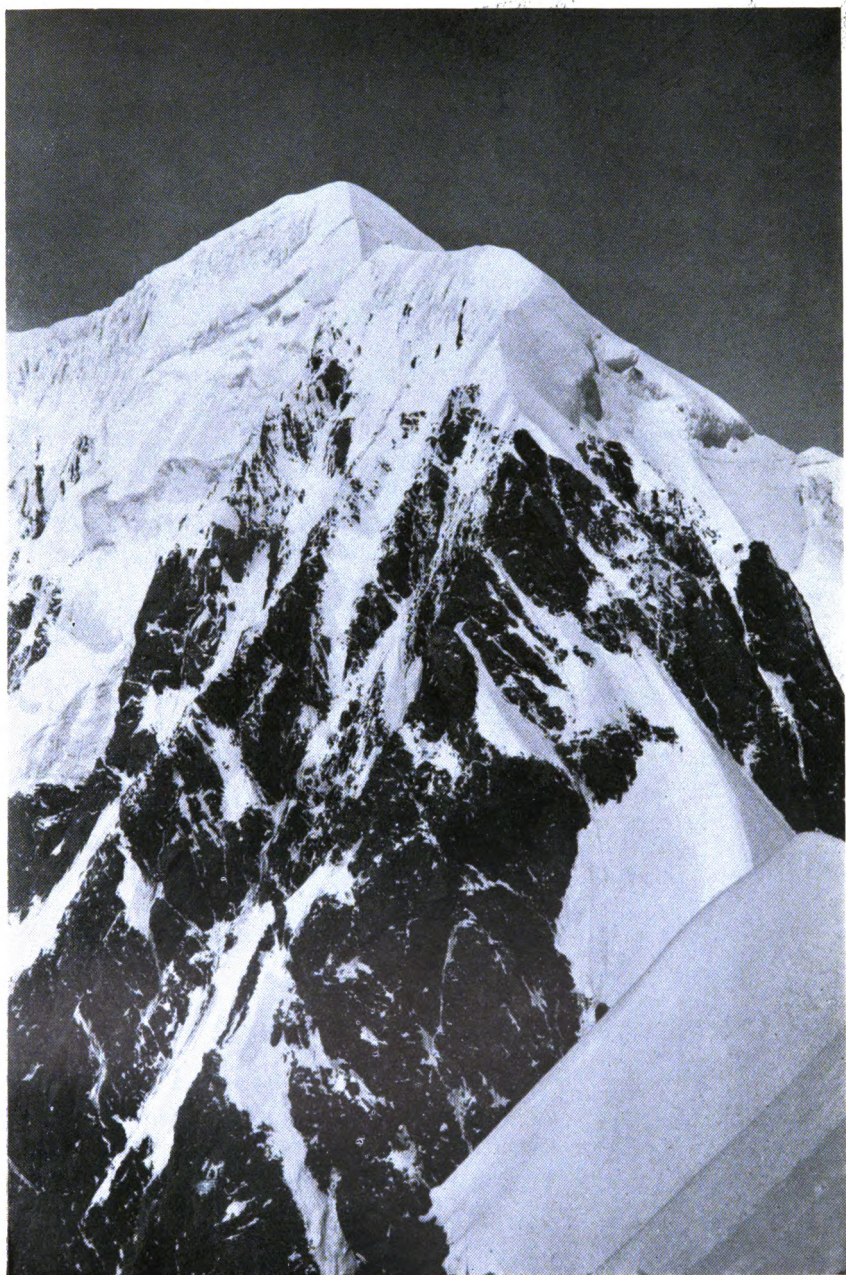
C=Tasman.

D='Shoulder.'

surprise that the last 10 ft. of the upper lip were nothing but a thin overarching gable of congealed stalactites of ice: inside was a wondrous icicle-fringed grotto, wherein our bodies threw shadows of deepest ultramarine in the dim light. A short way up the final ridge, we shirked an attack on an overhanging schrund, and skirted along its lower lip on the E. face for quite 200 yards, before a chance of success presented itself. Here the obstacle ran up into a bay, to the apex of which we mounted. To our left the schrund forked, the upper prong narrowing rapidly to a thin crack. The day was won if we could attain the floor of the upper fork, which was choked with snow.

Direct ascent to it was impossible owing to the unbridged chasm of the lower prong, but we could cross the main schrund on débris straight in front of us. The almost sheer wall opposite was blotched with some frail snow-pimples, which formed a precarious and irregular ladder, whose stability seemed to me insufficient to withstand our weight. I was leading at the time, but felt doubtful whether my icemanship was delicate enough for the job. Kurz, who was more hopeful, stepped gallantly into the breach, and with brilliant skill mastered the problem. By deft foot-pressure each pimple was so trodden down as to give the maximum support, but the rungs were so awkwardly spaced, that I for one found it extremely difficult to raise my weight from one to the other without a dangerous thrust from the hind foot, the ice being too hard to allow of a driven pick to help the leverage. None of the essential steps on this 15 ft. ladder collapsed under us, and at the top of it a more substantial traverse landed us on the sloping floor between the prongs, whence, breaking through a screen of icicles, we emerged on the face, walked round the end of the crack and cut our way back to the ridge about 80 ft. above at its steepest and acutest point. The edge here was too adventurous even for my new 'Eckenstein' crampons without steps, but we found below the slight corniche on the E. flank a convenient groove where hard snow gave good footing, till the angle eased off. On the last lap, wildly elated at certain victory, we did a vigorous spurt, the right foot treading squarely on the edge and the left driven firmly into the steep ice of the W. face. The proud moment of attained ambition arrived at 8.50, exactly 7 hours after the start, 7 hours as intense with hopes and fears as I have ever spent on a mountain, for I confess without reserve that the conquest of Tasman had been an overmastering obsession of mine, ever since I first set eyes on its glorious majesty.

Our preliminary reconnaissance from Glacier Dome had satisfied us that, granted perfect conditions, there was nothing to prevent us from descending the virgin N. ridge, and, at its foot, either dropping direct from Engineer Pass, or else traversing Lendenfeld and descending from the next col which has twice been reached from the Grand Plateau by parties led by Peter Graham, and looks less steep and less dominated by hanging ice than the first alternative. In point of fact there was no symptom of undue danger in either of these broad open couloirs at this time of year, though when we traversed Haast and Lendenfeld a month later the sights and



Phot. M. Kurz.

MT. TASMAN FROM MT. TORRES.

Showing the unclimbed West Ridge, and on the left the top of the North Ridge.



Phot. M. Kurz.

MT. TASMAN FROM LENDENFELD.
Showing the North Ridge and Shoulder.

sounds visible and audible in the channel to which we committed ourselves on this occasion were enough to freeze the marrow in the bones of two cautious mountaineers with a strong dislike of perilous situations and a vivid memory of Captain Farrar's last words of advice to us before we left England: 'Achtung, immer Achtung!'

The N. ridge now lay before us in all its enticing length. The conditions could hardly have been better, the weather was certain and the day still young. After 15 minutes on top, spent chiefly in studying the magnificent N. face of Mt. Cook, we started down it, moving one at a time, but without finding it necessary to cut steps, the ridge being gentler in angle and less acute of edge than its sister on the S. The W. face in the upper part presented an Alpine phenomenon which neither of us had seen elsewhere. It was draped with row upon row of gigantic leaning columns of porous ice, perforated by deeply-cut funnels of almost circular section. The cause of them is obscure, but they are a permanent feature here, being visible in the earliest photographs. It is curious that the W. face of Mt. Cook too has a peculiar ice-formation, to which I shall refer later, also permanent and also unique in our experience, but quite different from that on Tasman. The E. side, as usual, was heavily corniced, and we had to proceed warily between the scallops of the W. and the oubliettes of the E. At 9.50 we paused for a meal on the N. shoulder, after which our cameras recorded faithfully a scene of Alpine beauty, which for me is unforgettable. Below us lay the immense névé of the Fox, and beyond it the west-coast bush and the illimitable ocean: to N. and W. a vista of ice-clad peaks, many of them all the more lovely in my eyes for having permitted my feet to wander up and down them: behind us the ridge which has been the subject of many day-dreams in the past years. The remainder of the ridge calls for no special comment, and we reached Engineer Pass without incident at 11.30. This col had thrice been attained from the W. by Canon H. E. Newton and Alec Graham between 1904 and 1907: they had been rightly confident that the N. ridge provided an easier route to the summit than the S., and only very bad luck in their weather robbed them of the first ascent.

Kurz's damaged knee was now becoming very swollen and painful, and no amount of auto-suggestion could deceive me into believing myself at my best. Accordingly we relinquished the traverse of Lendenfeld, and set about the direct descent of the 3000 ft. concavity leading to the Grand Plateau. Below the col

was a vast schrund, too deep to jump. Kurz had thoughtfully cut and carried some wooden stakes about 30 in. long in case of such an emergency, and round one of these well-planted in the upper lip we doubled the rope and slung ourselves down. The steep snow face was interminably long, as hot as an inferno, and not too secure. The snow was balling badly under our crampons, and the tapping of ice-axes against boots to loosen the balls became monotonous. The next $2\frac{1}{2}$ hours were not, strictly speaking, enjoyable in such a windless furnace. Near the plateau the fairway contracts to a gut, bounded on the N. by the cliffs of Haast and on the S. by the séracs of the E. face of Tasman. The gut itself is seamed with gigantic crevasses, from the clutches of which we escaped only by the narrowest possible margin, to slide thankfully down the last 300 ft. to the plateau by an easy groove. The plateau has a slight southward tilt, and seldom appears to soften into a morass: in virtue of which the 500 ft. of ascent to Glacier Dome, though tiresome, were not so exhausting as they might have been. At 8.20, $13\frac{1}{2}$ hours after our start, we regained the hut, and were welcomed by Mahan, a Dunedin student who was acting as our cook and porter, with a delighted grin and handshake.

Three days later we made the second ascent of the S. peak of Haidinger, the higher of its two summits (10,178 ft.) The party had been augmented on the 9th by the arrival of Mr. Clive and Miss Doris Barker, who toiled up the Haast ridge under a grilling sun with a large supply of extra food, including four 4 lb. loaves of bread, a commodity of which we still had plenty. If only it had been tinned fruit, they would have been even more welcome than they were. We followed FitzGerald's route almost exactly ('A.J.' 18, 73), except that after traversing from the Haast ridge on to the upper névé of the Haast glacier we went straight up to Pioneer Pass, which the former party appear to have short-circuited. Three years ago Milne and I found the pass defended by a most repellent schrund. This year we walked across it without any trouble. The long ridge from the pass to Haidinger was as entrancing as I had imagined it to be, when I regretfully turned back from it in 1924. The ascent took $7\frac{1}{2}$ hours as compared with FitzGerald's $8\frac{1}{2}$. On the top we found the bottle deposited by his party, and patiently extracted the decayed slip of paper which it contained. A few isolated words in a neat hand were still legible after 92 years, and the whole of the date, viz. February 8, 1895. The summit was calm and warm, but the steep ice-slope that leads to it was swept by a frigid wind, which made the descent of the forty ice-steps hewn therein excessively trying to a cramponless

party. Lower down, too, the snow-slopes, by which one regains the Haast ridge from the glacier, were in a distinctly dangerous state, so that altogether the descent took slightly longer than the upward journey. The climb, however, is quite first-class, and Miss Barker may be proud to be the first lady to have reached this summit.

The weather now broke, and we returned to the hotel for a day or two of rest and ablution. On the 17th we went right through to the Malte Brun hut. This attractive little hut has only eight bunks, but that night, tempted by the cloudless day, eleven people congregated in it. One of them was Miss Beattie of the Ladies Alpine Club, who had crossed Graham's Saddle under the guidance of Peter Graham. We had discussed the possibility of such a meeting a year before in England, and the event was all the more pleasant for being quite unrehearsed. The fine day was only a flash in the pan. Next day Kurz and I, defying the omens, made a cramponed dash at Elie de Beaumont (10,200 ft.), and got to within 1000 ft. of the top, before a fierce sou'-wester caused a precipitate retreat. The tiny hut groaned beneath the weight of wet clothes hanging from its rafters by the time the last party to return had shed its paraphernalia. Despite the constriction and the steam we were a very cheerful party. Peter Graham's inexhaustible fund of climbing anecdotes kept us all interested and amused, till fine weather dispersed us in different directions on the 20th. That day the Barkers and we climbed Aiguille Rouge (9731 ft.), and on the next Malte Brun (10,421 ft.) by the favourite W. ridge.

For our last full week at the Hermitage, Kurz and I elected to bivouac up the Hooker valley. There are three tempting expeditions to be made at its head: La Pérouse, David's Dome, and the W. face of Cook. The Hooker hut is too low and too distant to be a good base for these peaks, while the upper bivouac-site on a slab at the head of the glacier at an altitude of 8000 ft., though extremely convenient to climb from, is horribly exposed and isolated. The alternative is to camp on the Pudding Rock (approx. 5800 ft.) 3 hours lower down and a short 3 hours above the hut, from which retreat is possible in almost any weather. Two years ago I had spent the best part of a day in helping to extend the diminutive camp-site, build a solid wall and weed out angular débris from the floor. Here, with the aid of two strong and cheery porters, Mahan and Sheeran, we established ourselves with provisions for five days on January 24. It was not altogether without misgivings that we committed ourselves to the shelter of my frail tent: so far we had not been favoured with more than two consecutive fine

days, and the Hooker endures the first fury of every storm that swoops upon these Alps. We had the truly amazing luck to get into camp on the first of seven rainless days running: most of them, it is true, were marred by high wind, but two were perfect climbing days. On the 25th we went half way to Baker's Saddle, where Kurz made a rough sketch of the W. face of Cook, which helped us greatly on our traverse later in the week. On the 26th we made the third ascent of David's Dome (10,443 ft.), whose rounded hump to the left of Cook is so familiar to all frequenters of the Hermitage. The first ascent was made on February 9, 1906, by Canon H. E. Newton, R. S. Low and Alec Graham from the La Pérouse glacier on the W. side of the divide by the N.W. arête to its junction with the main W. ridge and so to the summit. The second was by H. C. Chambers, H. S. Wright, and Conrad Kain in January 1916, from the upper Hooker bivouac to Harper's Saddle, and then by the very steep but sound rocks of the W. face, till they struck the W. ridge high up. Our route was a variation between the two. From Harper's Saddle we mounted the névé-field, which runs up into the W. face, crossed the W. ridge at the lower of two obvious notches, reached the upper notch by a somewhat icy couloir on the far side, and then climbed easy, broken rock-ribs on the N.W. face, rejoining the W. ridge at the point where it becomes a narrow but fairly level snow-arête. We had meant to start at 2.30, but I had put my alarum watch for safety into my hat, a stuffy receptacle which it so much resented, that it failed to go off with its usual regularity, and we did not get off till 4.45. The loss of these hours probably robbed us of the conquest of the formidable Dampier (11,287 ft.) by its unclimbed W. ridge. We did not reach the top of David's Dome till 11.10. The ridge to Dampier was long, serrated and icy in the upper section. Our minimum estimate was 3 hours up and 2 down, and that meant a night out, a prospect we did not relish. As it was we did not get in till 5.15, just before the sun retired behind Baker's Saddle. We had designs on Cook for the morrow, and got everything ready, so that it was 8.30 before we retired to our hard beds, leaving only 4½ hours for sleep after a tiring day. When I woke at 1 A.M., clouds ominous of high wind dappled the sky. This prospect, combined with lack of sleep, determined us, after an agony of indecision, against starting. We woke again at 8 to face a glorious sun, and were torn in two between the fear of having lost our chance and the relief at having escaped the torture of driving tired muscles up 7000 ft.

of a great mountain. Eggs and bacon assuaged the mental conflict, and inaugurated a day of pure joy and perfect rest. We had an early evening meal, put everything ready again, and set the alarm for 1 A.M. At that hour the sky was again mottled, but this time with a perfectly uniform mackerel formation, almost motionless, which to my mind portended no evil. In fact, I was rash enough to predict a fine day and the probability of a break to-morrow: the calm day, indeed, materialized, but not the break. Kurz did not like the look of it himself, and in his abstracted study of the weather-signs allowed the eggs to get too hard. Realizing that the cause of the oversight was nothing but his intense anxiety to achieve Mt. Cook, I was easily able to forgive him. At 2.25 the tent was shut up, all our gear being stacked inside ready for removal later on. Rope and crampons were adjusted outside, and at 2.30 we were off on our supreme adventure.

The traverse of the three peaks was done for the first time on January 3, 1913, by Miss Du Faur, Peter Graham and Darby Thomson. In her book she quotes a letter written to her after the climb by a member of the A.C., who says: 'That ridge of Mt. Cook would be shuddersome at the best of times. I have walked underneath it on both sides, and looked along it from the top, and I can confidently say that there is not a ridge like it in Switzerland: mixed rock and ice, perhaps, such as the Teufelsgrat of the Täschhorn and maybe others, but nowhere that endless stretch of knife-edge snow, perched far above everything else in the world as it must seem.' Her own account of the central part of it is as follows: 'Ever since we had decided to attempt the traverse, the steep knife-edged ridge between the middle and high peaks had been to me a haunting horror. From wherever you look at it, it appears impossible. Now the moment I had dreaded had arrived, and the reality was all that imagination had pictured it.' At the end she expresses a doubt whether mortal being could be found bold enough to repeat the ascent. The challenge was accepted on January 31, 1916, by the dauntless Conrad Kain alone with Mrs. Thompson of Wellington, a marvellous feat unequalled for daring in the annals of the Southern Alps. Years afterwards Mrs. Thompson wrote a brief account of it in the 'N.Z.A.J.', and her impressions may be summed up in the verse she quotes therein:

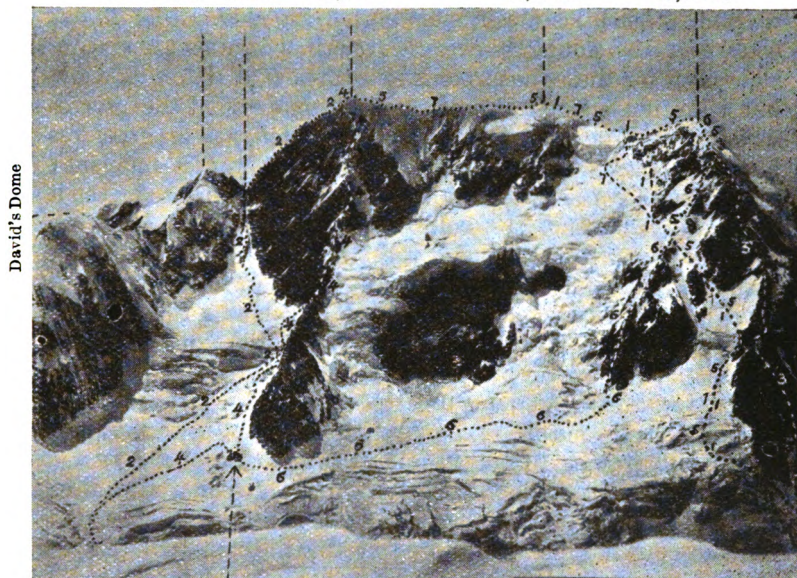
'My mountain calls, its floors are shod
With rainbows leading up to God.
But ah! the rugged ways and bleak,
That give upon that icy peak.'

The third and last traverse was made on February 24 of the same year, by Mr. S. Turner, Frank Milne and J. Lippe. The first and third parties had ice to contend with all along the ridge, while the second was favoured with good snow. The first started from a bivouac at about 7500 ft. at a point I shall refer to as Pt. 'A,' below the rock-ridge leading to the low peak. The others started from the upper Hooker bivouac at 8000 ft. None of the three had crampons.

At 2.30 we started traversing on an upward slant a stretch of glacier towards Pt. 'A' by lantern light, and soon had reason to regret our complete idleness yesterday. We ought to have trodden out a foolproof track while the sun shone. As it was, in attempting to avoid the vast schrund, which guards the portal between the rocks of Pt. 'A' and the ridge above, we ran into an *impasse* and had to wait for dawn to show us what proved to be the one possible through-route. We passed Pt. 'A' at 4.15, and proceeded without further setbacks through the wild ice-scenery above, following almost exactly the route marked '5' in the illustration to its junction with route '6.' Near this point we halted for breakfast from 7.15 to 7.40 at a height by aneroid of 10,070 ft. Above Pt. 'A,' the snow had been for some distance tiresomely crusty: on the steeper slopes above, however, it was so hard that Kurz with his shorter, blunter spikes, found the going a great strain on his leg muscles. After our meal, disliking the look of the upward traverse marked '1,' and still more the ice-clad rocks leading direct to the low peak, we struck out a line of our own more to the left towards what we deemed an easy spot to cross the final schrund. It proved very far from easy, however, and Kurz had some very awkward left-handed cutting to do, before it yielded. He then cut back to the right to turn the impending ice-wall above our heads, working at express speed: for the place was dangerous, and despite the early hour a small volley swept our route behind us a few minutes later. After some 50 steps he called me forward. I cut 30 more, and then found I could adhere safely without steps—thanks to my 'Eckensteins.' So I went to the end of my rope, cut a big step, and held firm while he scrambled up. By this method we saved much hard labour, and attained the ridge about a furlong N. of the low peak at 9.5, having accomplished 5800 ft. of ascent in slightly under six hours of marching. The low peak looked temptingly close, but we refused to be enticed, partly because we had no idea how long the rest of the climb would take us, and partly owing to the feeling that to diverge from our line just to bag an extra peak

would spoil the symmetry of a perfect traverse. So we set our faces northwards, and soon gained the foot of the great break, which bars approach to the central peak. Thanks to Kurz's colossal reach this grim obstacle was taken in our stride. Immediately above is the minor hump, to which the still unclimbed 'Anzac' ridge ascends from the east. Milne and I

	Green's		
Mt. Dampier	Saddle	12,349 ft.	12,173 ft.
			11,844 ft.



Upper Bivouac

Photo, E. Teichmann.]

THE WEST FACE OF MT. COOK FROM SUMMIT OF LA PÉROUSE.

Routes from the Hooker side.

1. Fyfe, G. Graham and Clark. 20 Dec. 1894.
2. Fyfe, Graham and Clark. 28 Dec. 1894.
3. Mr. H. Sillem and P. Graham. Feb. 1906.
4. Mr. Earle with P. and A. Graham and J. Clark. 1909.
5. Miss Du Faur with P. Graham and D. Thomson. 1913.
6. Mr. S. Turner with P. Graham and F. Milne. 1914.

had had designs on this ridge two years before, and doubtless others before us, but I believe no party has ever started for it. Now that I have looked down its final 200 ft., the crux of the problem, my enthusiasm to be the pioneer of this new route has lost most of its edge. After several photos we mounted easily to the Central Peak (12,173 ft.) and there spent five minutes

(9.50 to 9.55). Before us lay the glorious mile-long undulating ice-ridge to the high peak, the most marvellous aerial highway I can ever hope to see. In all its length there are only two little rock-teeth. The E. face, if our photos do not lie, has an inclination in its upper part of just over 70° , while the W. slopes lie back at an angle of about 50° . The formation of the ice here was most curious. Imagine a mushroom with most of its stalk removed, bisected vertically and stuck into a bank: myriads of such ice-mushrooms dotted the slope as far as eye could see. No doubt the ever-recurring nor'westers are responsible both for these mushrooms and the ice-pillars on Tasman, but I am not enough of a scientist to understand the process which produces them. Our crampons bit well, and progress was fast, as long as we kept the rope quite taut: a moment's inattention, and it embraced lovingly as many mushrooms as it had time to lassoo. It would have been pleasanter to utilize the rim of snow above them, the inner edge of the extensive cornice that hung its frozen waves over the Tasman face, but prudence, of course, vetoed the idea. Such was the merit of our spikes, however, that we cut not a single step along the whole ridge, and, despite several pauses for photography, which were richly rewarded, we had breasted the last sharp rise and occupied the throne of Aorangi by 10.30. With the serious part of our undertaking behind us and at peace with ourselves and the world, we feasted on delicacies worthy of such a mountain. How calm the summit was, may be gathered from the fact that the subsequent pipe was ignited at the third match. As we smoked, we studied the extensive panorama before us, and I came once more to the conclusion that, however interesting topographically, it has not half the charm of the view from lesser summits. Since 1913 every descent of Mt. Cook, save one, has been made by the Linda route, and we had no idea of varying the procedure, especially as it was familiar ground to me. Starting again at 11, we had put the ice-cap behind us by 11.30. The summit rocks gave more trouble. There had been enough snow on them the previous week to repulse an amateur party, after they had ascended the Linda glacier in remarkably good time. There had been a storm since, and we found a mess of water-logged slush filling all the crannies: but there was no *verglas*, and the rocks are so easy in themselves that the descent only occupied an hour. Thereafter, having plenty of time in hand, we sauntered down the glacier, only bestirring ourselves at the obvious danger-points, and stopping whenever the whim seized us to eat or smoke or photograph. The heat was now



Phot. M. Kurz.

THE ICE-RIDGE AND HIGH PEAK OF MT. COOK
From near the Central Peak.



Phot. M. Kurz.

LE RECEVEUR, FROM BELOW THE WEST RIDGE OF MT. TORRES.

intense, and the light so strong, that all our Linda negatives were badly over-exposed. From 2.30 to 3.10 we had a last halt in a safe spot above the Silberhorn corner. Below, in the gut of the Linda, we had the nearest approach to a hold-up that we experienced all day. We came to a place where only one line of advance was possible, over a horribly soft bridge. After some hesitation, though we could see no way through below, we crossed it, myself on all fours and Kurz by a method which combined dignity with caution. There was, indeed, no alternative, and, as usually happens, the vice relaxed its grip, just when the pressure was beginning to get uncomfortable. This was the last effort of the mountain, and beyond we slid rapidly past the corner and out on to the Grand Plateau. Still vigorous, I kicked up the 600 ft. to Glacier Dome, whence we sank speedily to the haven of the Haast hut. At 5.30 two happy men fell upon two tins of pears and apricots, and lubricated the inner furnace with oceans of tea, before retiring to sleep on a delicious mattress after four nights of a stony couch.

It may be of interest to give a table of the times taken from point to point by the various parties on this route :

Party	Bivouac	Start	Low Pk.	Cent. Pk.	High Pk.	Hut	Total
1	Pt. A. (7500 ft.)	02.00	07.00	09.30	13.30—15.00	22.00	20 hours
2	Upper (8000 ft.)	03.40	*11.00	(?)	14.40—15.25	21.40	18 hours
3	Upper (8000 ft.)	01.05	04.30	09.05	14.05—15.00	03.00	26 hours
4	Lower (5870 ft.)	02.30	*09.05	09.50	10.30—11.00	17.30	15 hours

* Ridge N. of Low Peak.

I have given these times merely to convince New Zealand climbers of the immense advantages conferred by crampons, particularly on amateur parties, few of whom, I believe, could tackle the immense labour this traverse entails without them, and complete the climb within 24 hours : and also to refute the heresies promulgated on the subject in New Zealand by Mr. Turner. 'I don't believe,' he says, 'in crampons, staples, or any artificial means of climbing whatever, as it makes it necessary to watch one more thing, and the risk of over-balance, or a crampon coming off, on one of our steep slopes is a risk not worth taking.'

The next day was fine for our return to the hotel, and the following for the recovery of our camp from the Pudding Rock, which was done for us by the Hermitage staff. Then a not unwelcome storm gave us three days to rest and prepare for our crossing to Waiho, where we were due to meet Hugh Chambers about February 4. We had been altogether nearly

seven weeks at the Hermitage : during all that time Mr. Clarke, the manager, Clem Williams, the chief guide, and his brother Vic, and the whole staff had done everything in their power to ensure our comfort and further our plans, even when these entailed inconvenience and extra work to themselves. It was not without a feeling of real regret that we set out on February 3 to tramp up to the Ball hut for the fifth and last time. On the 4th with 30 lb. swags we toiled against a strong gusty wind over Graham's Saddle, on the crest of which we met a gale so violent that we could not have surmounted the final ice-slope without the anchorage of our crampons. We had started at 3.15, and reached the Almer bivouac above the great ice-fall of the Franz Josef at 2.30 in rain which threatened to get worse. After an hour's rest and a brew of tea we took advantage of a temporary clearing to make a dash for the Defiance Hut, situated on the left bank between the two falls. Peter Graham had warned us in January that the upper fall was quite impassable this season, and had given me explicit directions how to avoid it : we were to ascend a spur from the bivouac, and cross the tributary Almer glacier on an obvious bench, contour across the head of the Carrel creek, and descend the perversely named 'No Go' creek, whence an easy passage across the glacier to the hut was assured. Lapse of time had muddled my memory, and when we arrived at the head of Carrel creek I assured Kurz that our instructions were to commit ourselves to the repulsive gorge that fell away at our feet and disclosed beyond a vista of cruel and wicked sharks' teeth. He naturally demurred, but I was adamant. Down we went, and by dint of our good crampons and much exciting saltation, endured without reproach and with exemplary patience by my trusty companion, we laboured through the lower half of the fall and entered the hut at 6.45. Next day we had more excitement, skirmishing with the lower ice-fall, to get to the bush track on the right bank. From the hut to the path took 2 hours, and at the end, having escaped finally from the wilderness of séracs, Kurz held his crampons aloft and uttered the dramatic words 'My crampons, I kiss you !' Chambers met us on the track and led us to Waiho, where we received a warm welcome from the Grahams. Our plan now was to bivouac high up the Fox glacier, and try to repeat some of the successes which fell to Canon H. E. Newton, Dr. Teichelmann, and Alec Graham in 1906 and 1907. The rest of the day was well spent in studying photos of the scene of our proposed activities. Next day was wet, but the camp-

gear and commissariat were arranged, and on the 7th we drove down by service car to the start of the Fox track with Dave Graham, a nephew of the famous brothers, and a Maori, Joe Bannister, to help us carry the stores necessary for six or seven days' absence. When all our separate packages were cast forth from the recesses of the car, rucksacks and sugar-sacks, ropes and paper parcels, imagination boggled as to how they were going to be stowed on our backs. The load to be divided must have been close on 250 lbs. Our porters shouldered a liberal 60 lbs. apiece, and the rest adhered somehow to us three. At the slow crawl such burdens enforce, we slouched through the bush, then along the right bank of the Fox river to the snout, stumbled across its dreary moraines, and a little later established our first camp on the left bank under an old moraine cliff, which looked and was perfectly safe, until a mischievous kea spotted our camp from a distance, circled round for a bit forming his plan of campaign, and straightway began to prise out loose boulders directly above us with his beak and launch them at us with screams of delight. Having scared him away with some accurate sharp-shooting, we lay down to sleep, trusting that if he returned the missiles would bound over our prostrate forms. Next day we mounted the glacier till the lower fall forced us into the gully between the ice and the hillside. Above the fall is a fairly level section, on which we crossed to the scrub-covered bench on the side of the Chancellor ridge, near the head of which we pitched our second camp. The shortest way to reach the upper névé of the Fox from here is to skirt the edge of the glacier below the continuation of the Chancellor ridge: late in the season this becomes impossible, and a long détour must be made to the top of the ridge and down on to the névé from above. To save time in the morning, the porters and I with all the tinned goods explored the short route, and, with two deviations on to the steep rock-wall that bounds the glacier, managed to get through to the névé, where we made an oasis of tins in the league-wide desert of snow. On the morrow we were on the move at 4.15 and reached the dump at 5.20. Here the porters had to leave us to secure their own retreat to the Defiance hut, a complicated route for which clear weather and plenty of time are essential. They unloaded the heavy stores which they had carried so patiently, and left us with hearty good wishes. Dismay seized us, as we gazed at the hateful bulk of the burdens our own shoulders had now to bear. True that the final camp-site looked comparatively close: true also

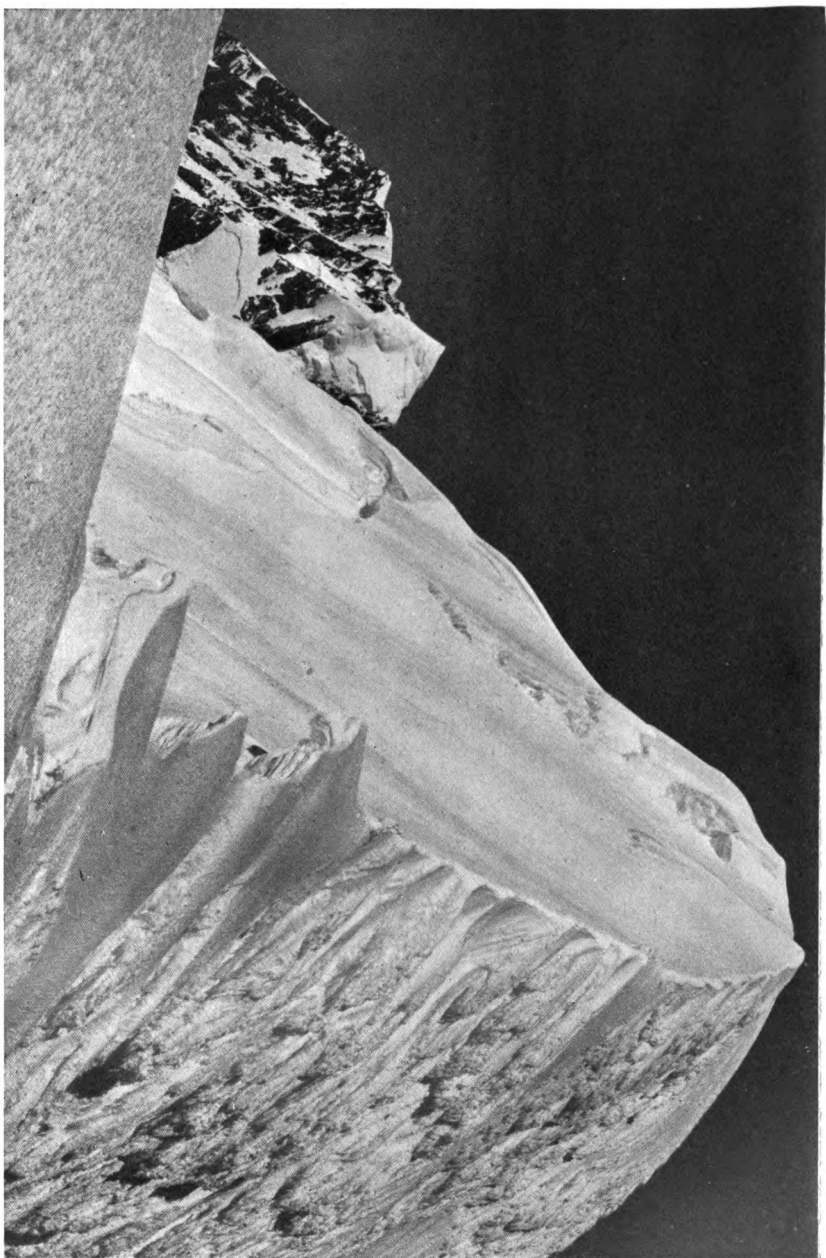
that the total load had by now diminished to some 170 lbs., thanks to consumption of food and reduction of camp-gear. But it is a problem to stow over 50 lbs. into and on to even a capacious sack, and when we had filled, as we thought, every inch of available space, we looked round and discovered that the bread and butter were still on the ground, looking most forlorn. Finally all was got on board somehow, except some broken bread, and we staggered off, soon to find ourselves in a maze of crevasses, the threading of which was nervous work with so much top-hamper. Three hours later we came to an end of our travail under the cliff of Pioneer Ridge. Of our bivouac the less said the better. We rejected the old 1906-1907 site, disliking its extreme exposure and lack of water, in favour of one where we obtained fair protection plus water, but suffered the acme of discomfort on a rocky floor strewn with large sharp scree. Though we were at over 7000 ft., the cold was not severe, and I found that I could sacrifice some of my clothes to pad my back without freezing in my light sleeping-bag, so that, though the boon of sleep was denied, I procured some alleviation of a torture which a Spanish Inquisitor would have been proud to invent.

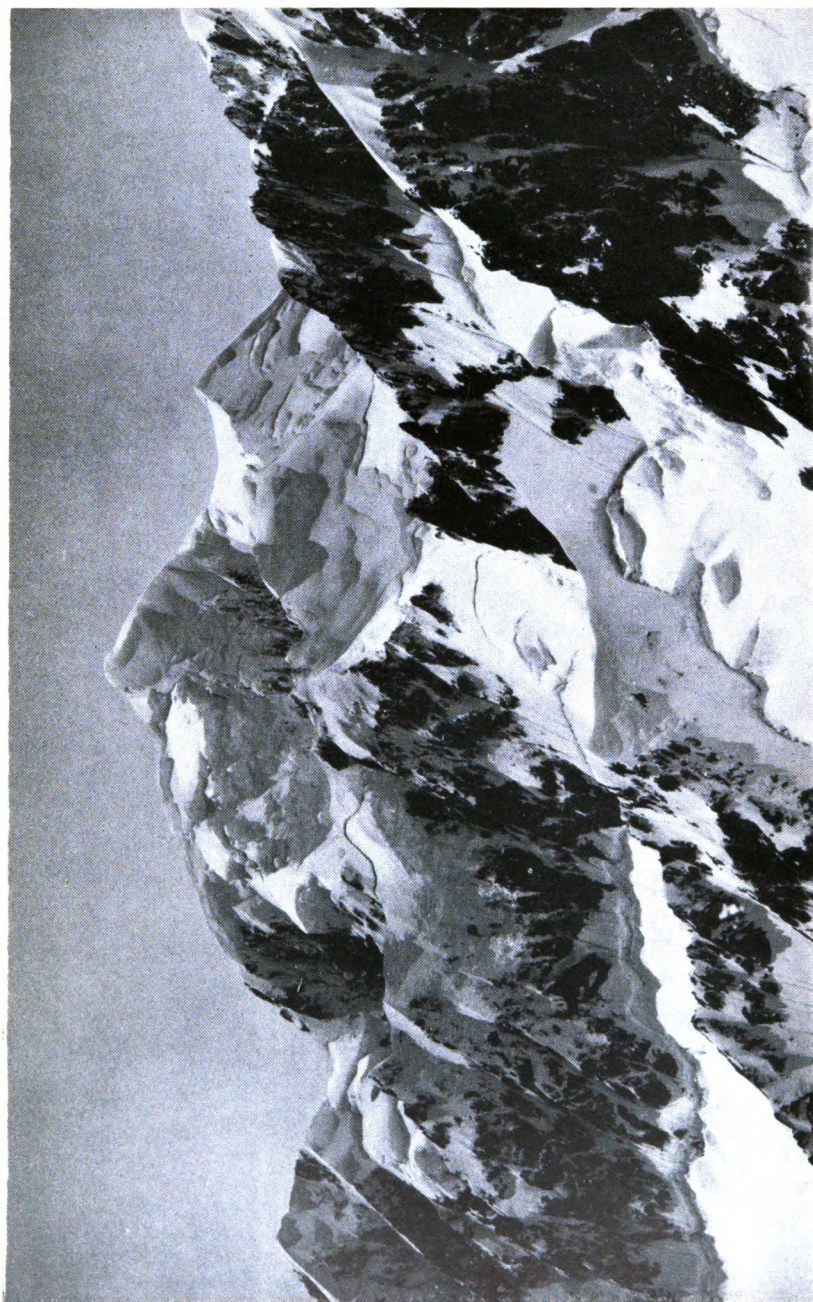
The same afternoon, while Chambers, who without training had manfully borne his share of the common burden, rested and ordered the camp, Kurz and I climbed the virgin Le Receveur, the next peak to Torres on the ridge running W. from Tasman. Its height is given on the latest map as 9562 ft. Besides securing a first ascent, we gained knowledge of the W. side of Torres, which was of great use two days later. From camp we went to the col between Torres and our peak, whence an interesting little snow-ridge took us to the top. A depressing drizzle thwarted our design of attacking the next peak, Big Mac, as well, and sent us straight home, the whole expedition taking only 5 hours. On our return we found that Chambers had erected one end of the tent on a clothes-line of string, secured to crevices in the rock-face by sardine-tin openers, while the entrance-end was strutted on an ice-axe and tautened by some odd bits of spunyarn knotted together. This crazy shelter might have supplied a Heath Robinson with every detail for a caricature of a Mountaineers' Paradise, especially if the artist had caught me crawling out of its wholly inadequate doorway in my old climbing suit, by now in a lamentable state of decomposition. Supper was also ready, the chief attraction being one of Chambers's famous tomato soups. This is a mélange of many ingredients, blending into a delicious whole,

Phot. H. E. Porter.

MT. TASMAN FROM THE NORTH SHOULDER

Showing the final 350 ft. of the North Ridge. Behind, on the left, is Mt. Cook.





Phot. H. E. Porter.

MR. TASMAN FROM DAVID'S DÔME.

On the left is the West Ridge descending to Mt. Torres; on the right the South Ridge and the Silber Horn. Below is the La Pérouse Glacier.

which courses like nectar through the veins. 'Eat soup and keep well,' says Campbell's popular American advertisement, 'Let no day go by without its plateful of hot, nourishing, delicious soup.' We took Mr. Campbell's advice, but to the profit of his rival Mr. Heinz of the 57 varieties. There was absolutely no temptation to linger in bed, the tent being a tight fit for three even on perfect ground, while here we had to conform our three big bodies to the accidental deformities of the mountain side. I was out before dawn to start the cooker. There was a high wind on the divide, and after breakfast we gave the weather an hour to make up its mind. It decided in our favour, and we set out at 8.15 to traverse Haast and Lendenfeld *via* Pioneer Pass. I had twice reached the pass from the other side, and each time the upper névé of the Fox had appeared to be a gently-sloping, almost unbroken snow-field. In reality it is furrowed with immense crevasses, which are invisible, as one approaches from below, almost to the very lip. The two miles from camp to pass took $2\frac{1}{4}$ hours. After a halt on the pass we started again at 11.5 to make a new route up Haast (10,295 ft.), which so far had only been ascended once, by Canon H. E. Newton and Alec Graham in February 1907 up the S. ridge. Haast has at least three summits of over 10,000 ft., of which, as far as I know, only the lowest, that on the main divide, has been climbed. Having scaled an easy rock-buttress above the pass, we attained the great E. ridge at noon. It had formerly been one of my ambitions to climb this ridge in all its length from the Haast hut. We had followed the lower third of it for two hours on our ascent of Haidinger, and we now spent $1\frac{3}{4}$ hours on the final section, leaving the central and probably most difficult part still untouched. I fancy the whole climb from the hut would take a strong party not less than 8 hours, and as very little of the ground is easy, almost as much time would be required for the descent. The portion we now wrestled with proved to be an exceedingly sharp snow-arête, broken by passages of ice. Near the top we were confronted with a most sensational step, where the snow rose at a steeper angle than any of us had ever met before on a sharp ridge. It was a difficult task stamping steps up it with one's body hard against the slope. After some 40 ft. it turned to ice, and I had to cut across the steep face to a rock-patch, from which vantage-point peering round the corner I was relieved to find a gentler slope of rock and snow, by which to turn the obstacle. The summit fell at 1.45, too late for us to explore the rock-ridge to the other tops, unless we renounced once

more the traverse of Lendenfeld. The latter made the greater appeal, and after a short halt we donned crampons and set sail down the ridge to the col, for which we agreed to suggest the name of Haast Saddle: then up again to Lendenfeld (10,456 ft.) and down to Engineer Pass. On completing this stretch Kurz and I had a thrill of pleasure at the thought that in three expeditions we had trodden every foot of the divide between the Silberhorn and Haidinger. All day long there had been a wonderful blue light on Tasman and Cook, which pleased the eye so much that one assumed that it would also please the camera. In this belief I expended films prodigally, but with much less success than usual. It was now 4 p.m., and high time to think of home. The ensuing descent for quite 500 ft. needed great caution: the route lay between two dangerous couloirs, at first on rock, then on bad snow with ice close beneath the surface. Below we wisely resisted the temptation to make a bee-line for our camp, and struck off at right angles to rejoin our morning tracks. We got in at 7.15, to enjoy a picturesque, robber-band sort of supper by lantern-light, which was unduly extended owing to our disinclination to writhe on our Procrustean couches for a second night.

Gladly I hailed the first glimmer of light on the 11th, and crawled out to welcome another fine day. This time we were away by 7.20 with Torres (10,376 ft.) for our objective. The only previous ascent of this mountain was by Canon H. E. Newton, Dr. Teichelmann and Alec Graham on February 4, 1907. Starting at 3.40 from a bivouac very close to ours, they had taken to the rocks before the rise of the glacier to the col between Torres and Le Receveur, and then followed the W. ridge throughout, reaching the top at 12.15, and regaining camp by the same route at 8.40. Alec Graham had suggested to us that we might find a shorter route on the S. side of their ridge, and we had confirmed this idea from Le Receveur on the 9th. We gained the col at 9.25 and after a halt till 10.5 sped on our crampons up the glaciated face. A mile-long crescent schrund guarded the heights above, which could only be crossed far away to the right, so that we were forced on to a subsidiary ridge, where unexpected ice impeded our progress. The W. ridge, when we got to it, was another of those narrow snow-arêtes, to which we were now so well accustomed. Along it we stamped a cautious way to a solitary patch of rocks, where Chambers, who for some time had been combating his enemy, *mal-de-montagne*, regretfully decided to rest and await our return (12.30). The top seemed only an hour away, and we

went on, promising to be as quick as we could. The snow-arête after some hundreds of yards impinged on a rock-buttress, which had several concealed gendarmes in its upper reaches ; these rocks would be quite exhilarating, if only they could be swept clean of surface débris. At 1.50 we gained the top, a delicate snow-cone, from which we once more worshipped the majesty of Tasman, still looming far above us, and only attainable, as far as we could see, by a party willing to sleep out on the ridge. When we rejoined Chambers, we found him feeling almost vigorous again, as a result of deep-breathing exercises. Diverging nowhere from our morning route, we re-entered the bivouac at 6.25. The clouds seemed ominous of approaching storm, but a third night had to be endured before we could start to escape. We had hoped to return by the high-level route from the head of the Fox to the Franz Josef over Mts. Roon and Moltke, with the tracks of our porters to guide us. But these had completely vanished, and a mistake, only too easy in bad visibility, might be too costly to tired men, still heavily laden. Kurz, it is true, was as fit as ever in body and mind : but we had put Chambers's untrained muscles to too-severe a test, and lack of sleep had robbed me of my mental alertness. So we descended the Fox, taking our time, as the weather held up after all, and despite some rebuffs and anxieties in the ice-falls got through to the ramshackle tourists' hut at the entrance to the bush before nightfall. Tired though we were, the insect life of the hut proved too venomous, and we soon migrated to a stretch of sand on the river bank, where the pests dared not pursue us, and there enjoyed a perfect sleep. Sometimes excessive greed for blood defeats its own object, and the disgusted victim breaks away from the toils of the blood-usurer. Next day we returned to Waiho in bright sunshine : we arrived there feeling like Lord Fleetwood in 'The Amazing Marriage' after his first mountain walk. 'Up there,' he says to the man who had introduced him to new delights, 'one walks with the divinities. . . . You're right over and over again, when you say the dirty sweaters are nearer the angels for cleanliness than my Lord and Lady Sybarite out of a bath, in chemical scents.' For all that we did enjoy our baths, and still more the reflection that we had once again utilised every single day of a week's fine weather, and had concluded our investment of the enchanted ground, of which Tasman is the citadel, with a success which outdid my most optimistic dreams.

How much of that success I owe to Kurz's splendid

icemanship and equable temper will, I hope, have appeared in the course of my paper. For the success of our last campaign a special word of thanks is due to the Graham brothers, whose encouragement and expert knowledge were invaluable to the party on ground completely new to them, and who supplied our needs with such detailed thoroughness that nothing of importance was missing in our camp. Nor shall we forget the pleasant days we spent after our return, when we could afford to laugh at the teeming rain, which kept us not unwilling prisoners indoors. One last word of thanks must be rendered to the demon who presides over Friday. Sealy, the Silberhorn and Tasman, Malte Brun, Cook, Graham's Saddle, Torres, all these succumbed on that reputedly unlucky day. But the secret of how we won the demon's favour is a mystery, which I cannot reveal to the uninitiated.

SOME SPANISH MOUNTAINS.

By W. T. ELMSLIE.

THE SIERRA NEVADA.

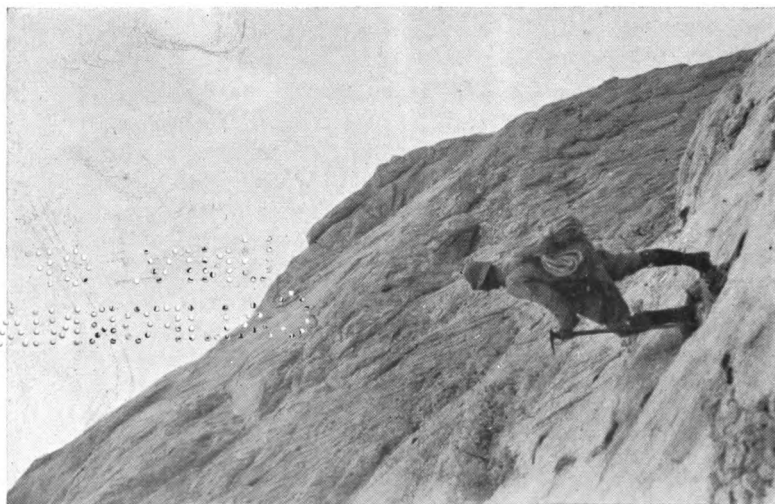
TOWARDS the end of last July we¹ made a brief visit to the Sierra Nevada—the highest range of mountains in Europe, it will be remembered, after the Alps. We ascended the two highest summits, and traversed the ridge between them, thus seeing what is admittedly the finest scenery to be found in those parts.

The range is distinctly disappointing, and has been over-written, although Charles Packe's article in 'A.J.' 4 gives a good general impression of the district. John Ormsby's remark ('A.J.' 3, 12) that 'the north face of the Wetterhorn . . . is soft pastoral scenery compared with the Corral de la Veleta' is simply grotesque. Though on a much larger scale, the main range is little wilder than the ridge of Helvellyn. The crags are for the most part composed of rotten outcrops of rock, divided by slopes of shale; and though many of the corries are fine and impressive, they are more akin to British hills in character than to the Alps.

An electric tram now runs at frequent intervals from Granada up the Genil valley to a terminus ('Sierra') a mile or two beyond Güejar. The valley presents imposing gorge scenery

¹ Messrs. G. Manley, R. G. R. West, and the writer.

Day of
Celebration



Phot. G. Manley.

PART OF N.E. FACE OF NARANJO.
The Great Slabs.



Phot. W. T. Elmslie.

CORRAL AND PICACHO DE LA
VELETA.

The Summit is immediately to the
right of the vertical crag in the centre.

at places. From the terminus a rough road winds up the hill for $4\frac{1}{2}$ kilometres to the Hotel Sierra Nevada. This is under the same management as the Alhambra Palace at Granada, and is thoroughly comfortable, though expensive. It is beautifully situated, with fine gardens, and is a popular centre for winter sports. It claims to be at a height of 1500 metres, but this is perhaps an over-estimate. Close by is an unpretentious *posada*, which is said to be quite good.

A way may be found amongst a labyrinth of paths up the hillside to the W. of the Barranco San Juan, till the patches of barley, maize, and potatoes are exchanged for the open hillside at San Francisco (about 2250 m.; $2\frac{1}{2}$ hours), an unoccupied building resembling an observatory. There is a peasant's cottage alongside. The Picacho de la Veleta (3430 m.) is now in sight at the head of the valley, and is attained in three hours by keeping up the ridge on the right, till it is possible to look down on the tiny patch of *névé* (dignified by the title of the 'most southerly glacier in Europe') in the Corral. The ridge hereabouts is narrow and slabby, and the easiest ascent of the last thousand feet lies somewhat to the W. of it.

It may be possible to descend directly on to the ridge which connects the Veleta with Mulhacen; but we preferred to avoid the crags, turning them by way of the Col de la Veleta, and so keeping along to the S. of the ridge. This involved descents into the heads of four valleys, and long traverses on large, loose scree; but the route was interesting throughout, and it would clearly have been foolish to try to keep along the ridge itself, which was largely composed of crumbling little crags.

The N. face of Mulhacen and of the Alcazaba is quite imposing at a distance; but the dark crags are seen to be much broken up when they are approached more nearly. It is not correct to speak of the Corral occupying the whole area between the Veleta and Mulhacen on the N. side; there are several quite distinct corries here.

Mulhacen (3481 m.) has two open shelters on its summit, and a ruinous chapel, which we found to be half filled with snow. Three to four hours should be allowed in each direction for the traverse between it and the Veleta.

THE PICOS DE EUROPA.

If John Ormsby exaggerated the charms of the Sierra Nevada, he certainly did not do the same for the Picos, highly as he spoke of them. These mountains lie in the N. of Spain, and are most easily approached from Santander, by rail to

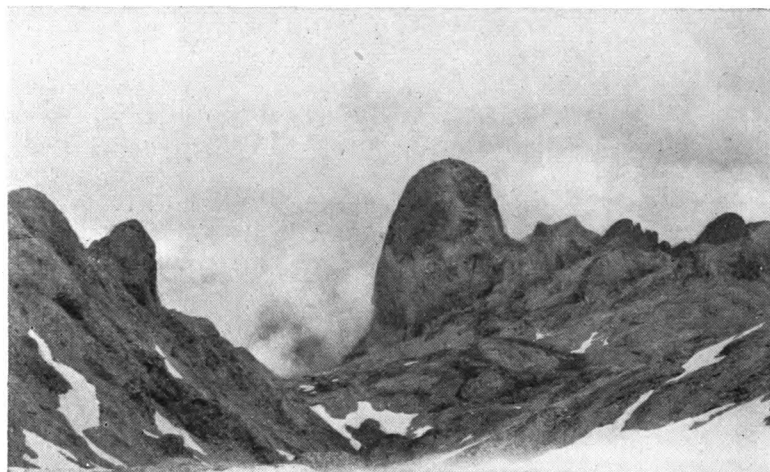
Unquera, and thence by motor-bus. The two chief characteristics of the district are the remarkable narrow gorges through which the rivers flow, and the fine serrated summits of the mountains. The rock is limestone, and if the higher regions are barren and waterless, the river valleys are luxuriant with vegetation.

The highest summit is the Torre de Cerredo (2642 m.), whilst the Llambrion falls short by only a few feet. Ormsby attempted to ascend the latter, but reached a subsidiary point only, comforting himself with the reflection that to spend a night out in the hope of reaching the higher point was 'altogether too much honour for a mountain not 9000 ft.'

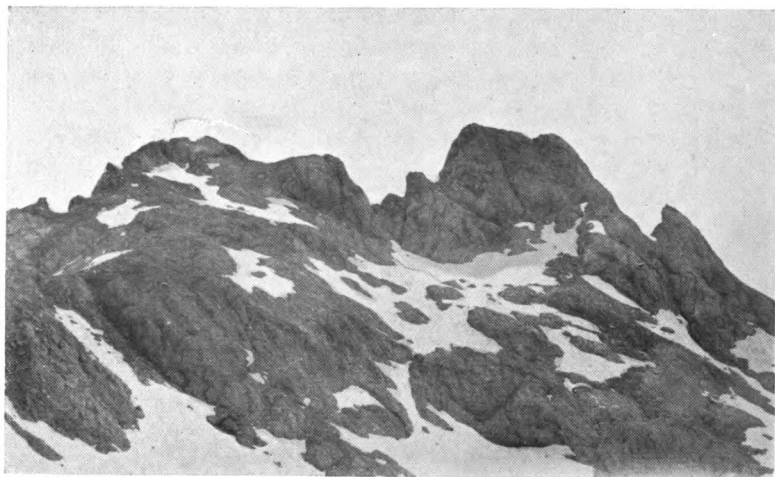
There are only two books which give any useful information about these mountains; and the number of ascents they describe is comparatively small. As the district has only recently been explored by climbers, the probability is that a large number of the summits (many of them unnamed in the maps) are as yet unascended; but this we were unable definitely to ascertain.

A hut has been opened in the Canal de Camburero, an hour or two above Bulnes, which is easily reached by way of Arenas de Cabrales. It is situated rather too low down to be really useful as a centre of exploration; but we were able to use it for the ascent of the Cerredo, by way of the Collada de Arenizas alta, and a snow slope which led high up its E. face. This is the only known route for ascending the mountain.

The great attraction of the vicinity, however, is the Naranjo de Bulnes, a mighty rock monolith, standing clear above its surroundings a thousand feet or more. It is not beautiful; it is astounding. Close examination reveals that it is composed of extraordinarily steep and smooth slabs, offering the climber neither satisfactory hold nor resting-place. We attempted to ascend on the N.E., from the top of the gully which runs up on that side of the mountain; but after vainly endeavouring to find a justifiable route across the great slabs, we retired to examine the face from the other side of the gully. Unfortunately, thick mist came on at this precise time, and only cleared at sunset. The examination which we then made did not make the route to be followed at all certain. Obviously a guideless party would require to spend considerable time in investigation before making the ascent. We were sorry that we had not accepted the offer of two local men (one of Arenas, one of Cain) to accompany us to the top; but whether they had themselves been there is by no means sure.

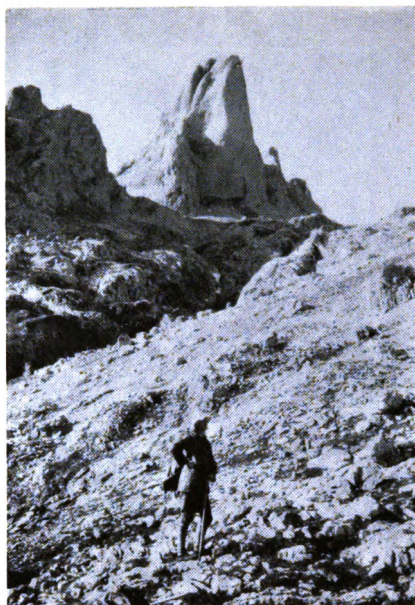


NARANJO DE BULNES
from S.W.



Photos. G. Manley.

TORRE DE CERREDO
from E.



Phot. G. Manley.

NARANJO DE BULNES
from S.W.



Phot. W. T. Elmslie.

VIEW N. FROM CERREDO
[the Peaks are probably the Tête Labrouche and Pico de
los Cabrones].

The first ascent was made by a local man, called 'El Cainejo,' with Don Pedro Pidal, Marquis of Villaviciosa de Asturias, in 1904. Gustav Schulze, of the Munich Ak. Alpenverein, made the next ascent, also by the N.E. face, alone—a truly astonishing feat. He descended on the S.E., but gave it as his opinion that this route could not be used for the ascent, as in one place an *abseil* was absolutely necessary. The visitors' book at the hut, however, contains a description of an ascent made by a party which included a woman, led by a local man, Victor Martinez. They ascended from the S.E., and descended by the N.E. Whether there have been any other ascents is doubtful; but on the summit we could see a pole; and there is a picture postcard purporting to show V. Martinez on the top.

The Naranjo is by no means the only difficult peak in the group. De Saint-Saud considers that the Torre Santa, above Caín, is quite as hard; but the Spanish writers consider it perfectly easy! There seems to be a question of national pride involved here, as the Torre Santa was first climbed by Labrousche, a Frenchman. And quite apart from these, there are peaks innumerable, all difficult apparently, and many of them presenting really serious problems.

An expert party would find enough to occupy them in the Picos for several weeks. And they would be ill-advised to make a shorter visit. The topographical difficulties are considerable, partly owing to the large number of rock summits crowded together into a comparatively small area, partly owing to the number of deep gorges with practically impassable sides. De Saint-Saud's maps are good, but not nearly good enough. The mistakes that we discovered were few, but the omissions were many; and no attempt is made to indicate the tracks. Moreover, the continual occurrence of *hoyos*, or large circular depressions, like enormous dry lake-beds, tends to increase the confusion.

The district is quite unspoiled. We found the natives very friendly, though their dialect was hard to comprehend. The question of food supplies was rather difficult; in villages like Caín there are no regular shops, and Señora Maria, in whose house we stayed, had very little with which to provide us.

There are two or three little glaciers, but they are so small as to be almost negligible. In mid-July, however, there were considerable patches of snow, which not only provided us with water to drink, but frequently offered a convenient means of ascent and a rapid glissade on the return journey.

The Picos de Europa, as a climbing ground, may be compared with the High Tatra or with the Dolomites. They differ from the former in the composition of their rock, and in the lack of streams and mountain lakes. They differ from the Dolomites in being much more closely grouped together, in the lack of facilities for climbers, and in the absence (so far as we could observe) of large grassy uplands. To the explorer, and the searcher after new climbs, they present far greater opportunities than either of the other groups. As to the actual difficulty of the climbing, our observation bears out Schulze's words :

'The special difficulties of the ascent' [he is referring to the Naranjo] 'consist not so much in the steepness of the rock, with its inherent dangers, such as are met with in the Dolomites and in the limestone mountains of the Tyrol, as in the extraordinarily smooth condition of the rock, some of the steps being most risky.'

Books and Maps.

'Picos de Europa,' published by the Club Alpino Español, Madrid, 1918, is unfortunately now out of print. It is a delightful book, enriched with numerous photographs, and edited by Pedro Pidal and Zabala. Descriptions of the principal peaks are given, but the accounts of the ascents are not very clear. The Naranjo, however, is dealt with very fully.

'Monographie des Picos de Europa,' by Le Comte de Saint-Saud, Paris, Henry Barrère, 21 Rue du Bac, 1922. This is another delightful and well-illustrated book, also, unhappily, out of print. The maps, however, which were drawn up by L. Maury on the basis of the author's observations, and which accompany the book, are still obtainable from the publisher. These maps are quite indispensable for anyone visiting this district. The 1 : 100,000, with contours, is fairly accurate so far as it goes ; but there are serious omissions, and only the main paths are marked. The same must be said of the 1 : 50,000 (uncontoured). As in the Spanish book, the principal summits are described, but the information about ascents is not always adequate.

No other books are of any practical value to the mountaineer in this region.

For the Sierra Nevada, the best map is sheet 85 of the 'Mapa Militar Itinerario de España,' 1 : 200,000, revised 1916. It is extremely poor, but there is nothing better available.

Univ. of
California



LA MEIJE.
 Showing the W. arête and N. face (in profile) taken from below the Brèche.

THE WESTERN OR BRÈCHE ARÊTE OF LA MEIJE.

IN 'A.J.' 33, 215 *seq.*, the late Mr. Harold Raeburn published a very instructive article, 'The W. Arête of the Meije.' The somewhat freak photograph was, however, so difficult to understand that the article left me, as probably others, in a state of some perplexity as to the exact line of ascent.

Mr. C. H. Brook, who has been a close student of the Dauphiné the last few years, showed a photograph of the arête at a Club Exhibition not so long ago. He was good enough to tell me that Mr. C. M. Sleeman of Queens' College, Cambridge, possessed an even more instructive picture which is here reproduced. The photographer's name is unknown.

M. Pierre Dalloz, the authority on the Alps of the Dauphiné and director of the Syndicat d'Initiative du Dauphiné at Grenoble, has, at my request, kindly marked the lines followed on this W. arête, which is an independent route only so far as the *Pas du Chat* when it merges into the ordinary S. route just below the Glacier Carré. It is conceivable that this W. arête might be followed over Les Doigts and the Pic du Glacier Carré.

M. Dalloz writes :

'A is the Brèche de la Meije. A to B indicates a traverse below the crest on the La Bérarde side. One cuts a little couloir in which the rock is bad, and regains the arête at B in a little gap well seen in a profile picture. The actual crest of the arête can however be followed.

'At B at the foot of the great escarpment formed by a series of slabs separated by little platforms one can mount straight up (Loustalot) or make a bad flank march on the N. (La Grave) side, which leads into or close to the bed of the great couloir seen in the photograph. One thus gains the *épaule* C and follows the fairly narrow crest installing at the point where it is cut off a short *rappel*. Finally a wide "vire aux bicyclettes" leads to D, just above the Pas du Chat, where the ordinary route is joined.

'To my knowledge the arête has been followed four times :

'(1) By C. Verne with Pierre Gaspard père et fils, Maximin Gaspard and J. B. Rodier, in 1885.¹

¹ *Alps of the Dauphiny*, Coolidge edition, 1905, p. 62.

'(2) MM. Main and Plossu in 1919.²

'(3) J. P. Loustalot and Mlle. Y. Millière in 1922.³ They followed the crest throughout.

'(4) Jean Vernet and R. Toumayeff in 1926. They followed a route between Verne's and Loustalot's.

'Verne's route is not always excellent on account of its N. exposure.

'Loustalot's, although very impressive, seems preferable. It does not appear to be very difficult. Loustalot in conversation compared the difficulties as equal to those of the S. wall below the Glacier Carré. Every ten or fifteen metres there is a little platform where one is all right. At the same time Loustalot's great skill must not be forgotten.'

Die Alpen (the monthly issue of the S.A.C.) for August 1927 contains a very striking picture of the La Grave side of La Meije by Dr. Cav. B. Acquasanti, but I confess my inability to reconcile the topographical details.

J. P. FARRAR.

NOTE ON THE VIRO VALLEY PEAKS, CORSICA.

IN the event of any members of the Club intending to climb in Corsica during the Christmas or Easter vacations the following brief notes on the Viro valley may prove to be of interest. This is without doubt the finest mountaineering centre in the island, and as such would keep even a very active party busy for at least a month.

The Grotte des Anges (about 4500 ft.) provides sufficient shelter to enable a tent to be dispensed with. It is about 4½ hours above Calacuccia. The surrounding scenery is magnificent and other amenities (such as bathing, fishing, plenty of firewood) are equally attractive.

The Grotte des Anges is surrounded by mountains in the form of a horseshoe—the toe pointing W. Beginning at the S. end of the horseshoe heel (Punta Scopiccica) and working round the whole chain to the Cinque Fratri at the N. extremity of the heel, I have first-hand knowledge of the following mountains :

² Mr. Raeburn's paper, *A.J.* 33, 215 seq.

³ *La Montagne*, 1922, p. 228.

Punta Scopiccia (1510 m.). Easy of access direct from Grotto. Affords a splendid survey of the group.

Punta Castelluccia (2231 m.). Easy from Col de Foggiale (1965 m.), passing over Point 2186 m. Descent by N.E. ridge and face affords good climbing.

Capo Tafonato (2343 m.). One of the most attractive climbs in the district. Go *via* the Col de Foggiale to the Col de Tafonato, between the latter peak and Paglia Orba. Thence in 1½ hours moderately difficult, very exposed climbing to the N. (the higher) summit. The ridge thence to the S. summit provides one hour's magnificent climbing. Descent over the S. ridge is difficult but short. Tafonato is pierced by an enormous tunnel easily gained from the foot of the S. ridge, or from the Col de Tafonato. The view down over the tremendous precipices to the W. is extraordinary.

Paglia Orba (2523 m.). The Corsican Matterhorn. Go from the Col de Tafonato by steep snow gullies, or from the Col de Foggiale by long snow slopes, involving step-cutting at one place (very difficult climbing in summer in the absence of snow). The summit ridge of the mountain carries an enormous cornice. The ascent of Paglia Orba by the N.E. face is long and exceedingly difficult.

Col de Paglia Orba lies between the latter peak and Point 2350 m. This is an enjoyable but not difficult climb from the Grotto. The descent on the Filosorma forest side is long and difficult and the rock is unreliable in places.

Points 2350, 2205, and 2170 are three bold pinnacles. They were traversed together in 1926 by two Austrian climbers, who reported the climb as being long, difficult, and very exposed, but that the rock was excellent.

Capo Ucello and Capo Tighietto (2241 m.). The former is gained in moderately easy climbing by the E. face. The ridge thence to Tighietto offers no outstanding difficulty. Descent of the latter peak *via* the N.E. ridge and E. face. A most enjoyable 10 hours day.

Col de Minuta, between Punta Minuta and Capo Tighietto. Easy from the E., but the long descent into the Filosorma valley is complicated.

Punta Minuta (2591 m.). A magnificent viewpoint. The ascent by the S.W. ridge is a difficult and fine climb. Descent by E. ridge is easy. The much be-pinnacled N.W. ridge has not been climbed.

Capo Larghia (2520 m.). Has three bold summits, only one of which has been climbed (difficult).

Monte Falo (2549 m.). Easy from almost any direction. Can be picked up on the way to the *Monte Cinto* (2780 m.), the highest of the Corsican mountains.

Monte Albano (2093 m.) and the *Cinque Fratri*. Start at the depression due E. of the lowest of the *Fratri*; thence along the ridge and over all five summits. A splendid, long and often difficult climb.

The possibilities of new routes in this district are numerous. To mention the more important outstanding problems, we have:

- (i) The individual *Cinque Fratri* summits from the S.W.
- (ii) *Paglia Orba*, N. ridge } Two exceedingly tough pro-
- (iii) *Paglia Orba*, N.W. face } positions.
- (iv) E. ridge of *Paglia Orba*.
- (v) Col between *Ucello* and *Tighietto*.
- (vi) Pass through tunnel on *Tafonato*.
- (vii) Unclimbed pinnacles on ridge between Col de *Paglia Orba* and foot of *Paglia Orba*, N. ridge.

The above list by no means exhausts the possibilities.

I hope that the above notes may prove to be of service.

G. I. FINCH.

EXHIBITION OF PICTURES AT THE ALPINE CLUB.

THE Exhibition of 1926, an unusually good one, took place during the General Strike, and, as a consequence, was not visited by the customary number of Alpine devotees. This year it was probably seen by more than the usual number of visitors, but the quality of the exhibits as a whole, we think, did not reach quite so high a standard.

Mountain scenery is admittedly a difficult subject, and particularly so when the impression of the majestic grandeur of the Alps has to be conveyed. Artists are apt to declare that they dislike painting the Alps, that the lack of atmosphere and the immense scale of the peaks defeats all efforts to bring the imagination into play. To assert that there is no atmosphere at dawn and evening or when the mountains are swathed in everchanging mists, seems to us sheer nonsense and to indicate a lamentable lack of imagination. In summer the quickly changing lights and shades, the blending of peaks and clouds, the wonderful mystery of sunrise and sunset may well escape the powers of a budding Turner; but what better material can

the ambitious artist find to work upon? Then there is the Alpine winter, when the artist can run through the whole gamut of blue and yellow. Winter scenes need careful handling, and where the effect to be reproduced is expressed in degrees of whiteness from the furthest distance to the near foreground much skill is required in the accomplishment. On the other hand, the composition of mountain pictures presents, we think, fewer difficulties; the peaks are there to inspire us, the foregrounds are many and varied and it remains but to unite them. On one thing the mountaineer insists. The peaks must be correctly drawn and no artistic licence can be allowed to interfere with the accuracy of their outlines. The mountaineer does not wish that his pictures should resemble tinted photographs, and there were examples in the Exhibition which certainly approached this undesirable state. Our Exhibition of Photographs proves to us each year that it is possible to produce pictures by mechanical means, but the two arts are quite distinct. The photographer must rely on the variations of light and shade as expressed in tones of black and white, while the artist has the inestimable advantage of having all the colours of the prism at his disposal, to say nothing of being able to arrange to his own liking such details as foregrounds.

As regards draughtsmanship, the Matterhorn in particular has suffered at the hands of artists, and we can recall many, some of them famous, who have sorely mishandled this wonderful rock, making it either too spiky or too squat and depriving it of its dignity. This can only be conveyed by a correct drawing of its outlines, of which we would cite as an example Mr. Willink's masterly picture of this great peak in winter. The Matterhorn is one of Nature's masterpieces and it is not for mere man to attempt to improve on it. Impression and design are without doubt very desirable forms of art, but they should not lead the artist into conveying wrong impressions as far as mountain form is concerned. A good example of successful impressionist treatment of a great peak was shown in the oil-painting 'The Jungfrau,' by Sir Ernest Waterlow (lent by Dr. Roger-Smith), which was a very dignified rendering of a noble subject in which no fault could be found with the drawing of the peak. In olden days, and those are no further away than the latter half of the eighteenth century, all peaks in art had a terrible tendency to spikiness, as witness the intensely interesting collection of reproductions of pictures depicting the Grands Mulets which appeared in a recent number of the *ALPINE JOURNAL*.

The oil-colours, which were few in number, reached a high standard. Mr. Arnold-Forster's study of a glacier was one of the best we can remember to have seen. The effect of the tangled séracs was well brought out without insisting on too much detail, and the subdued greyish-green tones lent an air of mystery to the whole picture. In an entirely different type of subject, Mr. Graham Petrie, in 'San Vigilio,' gave us one of the most attractive pictures in the room, a delightful example of luminous colour. Miss Phyllis Woolner sent a pretty little study of flower-decked meadows, curiously resembling MacWhirter's well-known 'Spring in Tyrol.' Miss Benecke's 'Matterhorn from the Bricolla Glacier' was a simple design, rather flat in effect. The title, we think, must be incorrect, as the Matterhorn is not visible from the Bricolla Glacier. Three contributions by Miss Marguerite Kees, painted in body colour, displayed considerable strength and might almost have been mistaken for oils. The best was 'Lago di Lunghino.' In the 'Rothhorn' we thought the reds were too violent. Mr. Cecil Hunt, another exponent of body colour, showed four very accomplished examples of his art. 'The Meije' had that wonderful depth in the shadows which seems to be a secret of Mr. Hunt's. In the 'Silvaplana' the blue was rather too vivid, and we think upset the balance of the picture.

It was a real pleasure to see Mr. Willink's work on our walls again. 'Etna from Taormina' was a charming impression, and the members must have been delighted to see again some of the characteristic sketches of climbing incidents, originally drawn for the Badminton 'Mountaineering.'

The work of Mr. Colin Phillip and Dr. Norman Collie was distinguished by a marked vigour of touch. Mr. Phillip's 'Sex Rouge' was very finely conceived and probably one of the best alpine pictures he has given us, which is saying a great deal. It is easy to see that Dr. Collie loves the Scottish hills. His pictures are full of feeling and brought home to us the peculiar fascination of the atmosphere and landscapes of Skye.

Mr. E. W. Powell also sought inspiration in the Scottish Highlands, which materialised in pictures of considerable power in 'The Slioch and Loch Maree' and 'An Teallach from Loch Toll-an-Lochain, Winter,' while among his Swiss subjects, all good, 'The Finsteraarhorn from Egon von Steiger Hut' was a very charming study of an alpine sunset.

Mr. Walter West sent two delightful scenes on Lake Como; one called 'Sunshine through Mist, Bellagio,' stood out by reason of its exquisite effect of sunbathed mist and its perfect technique.

Mr. Howard Somervell's pictures, mostly of the Himalayas, showed their usual marked individuality in addition to artistic talent of the highest order. They were probably, from their subjects, the most interesting works in the room.

Mr. Lawrenson gave us a peep into the Killarney hills in two characteristic renderings of the prismatic atmosphere of that enchanting district. The blue tone of 'Carrantuohill' was perhaps a little exaggerated. Mr. Fred Stratton's clever impression of night 'From Cap Ferrat' showed how much can be conveyed by very little work.

Winter alpine landscape has an irresistible attraction for the artist and presents some exceedingly difficult problems. An extraordinarily clever realisation of sunlight on winter snow, 'Looking across Lake Léman from near Les Avants,' proved that Mr. Hardwicke Lewis' talent shows no sign of waning at the advanced age of 83. Miss Emily Paterson showed two finished pieces of painting, 'In the Bernese Oberland' and 'Snowstorm, Lauterbrunnen,' although we did not like the somewhat muddy tones in the last named. Her other exhibit bore an inaccurate title, as the subject was beyond doubt the Jungfrau from the Jungfraujoch, painted from an almost similar spot to that of Sir Ernest Waterlow's oil-colour already referred to.

Mr. Edgar Wybroo in 'An Alpine Glow' secured a delightful sunset effect, while his 'Evening Gleam on the Lake of Geneva' was still more successful. In another good picture, 'An Impression of Winter in the Alps,' the shadows in the snow might have been a little more emphasised.

Mr. Lawrence Linnell has his own way of conveying his impressions and his work is always interesting. The misty atmosphere in his pictures was most seductive. Mr. Alfred Topham showed a mastery of the lighting of winter snow, but the intense blue of his skies was not very convincing. A charming little study, 'Piz de la Margna,' came from Miss F. Montgomery Norton, and from Mrs. Dixon one of the best of the winter pictures in 'Near Mürren Station.' We thought the skies were too blue in some of Miss Phyllis Pearce's winter scenes, but on the other hand the snow was very cleverly rendered and the reflected light in the shadows was handled with happiest results, especially in 'Lenzerheide after the Storm.'

The work of Colonel Donne and Mr. C. G. Blampied is always a popular feature of our exhibitions. Of the pictures by the first-named artist 'A Dolomite Sunset' was a very alluring symphony in blues and rose pinks and decidedly the best of

his exhibits, although 'The Latemar and Karersee' also attracted much admiration. Mr. Blampied was well represented by 'Mont Blanc from La Flégère' and 'The Village of Dolonne,' both very pleasing; but still better was 'The Rosengarten' (lent by Dr. Roger-Smith), which was freer from the purple tones in the shadows which is rather too marked a mannerism of this clever artist. Mr. Clement Du Pontet has a somewhat similar mannerism in his lavish use of palish blue, which seems to pervade most of his work, but his two exhibits, 'Summer in the Alps' and 'Where the Sun shines,' had great charm.

Miss Hechle is obviously a mountaineer and in complete sympathy with her subject. It has been very interesting to follow her progress, and although we may not always agree with her interpretation her technique is beyond criticism and she displays unusual virility in the treatment of her subjects. 'On the Ortler' and 'Evening' (very happily framed) were her best exhibits, but 'Séracs on the Glacier de Bionnassay' also showed the skill with which she handles ice and snow.

In Mr. Lawrence Pilkington's 'Val Verzasca in Spring' and 'A Crag' we had the unmistakable evidence of the climber who knows his mountains and how to treat them pictorially, a remark which also applies to Mr. Brant in his two small contributions 'At Val d'Isère' and 'In the Val de Rhêmes.'

Miss Pawsey showed two pleasing figure studies, both of which were perhaps a little too dark in tone, which, however, suited admirably a delightful sketch of a chalet at Winkelmaten near Zermatt.

The scenery of the lakes is, as might be expected, a favourite subject at these exhibitions. Mrs. Moore, the talented daughter of Colonel Donne, displayed in 'The Karersee' a marked sense of colour, which Mrs. Dixon also possesses, as she showed in a very clever Turner-esque drawing of Lake Thun. 'Lago Maggiore from Baveno,' by Miss Kirkpatrick, was a dainty little work, and we liked even better the unconventional treatment of 'Across Lake Thun.' Mrs. Redman's 'Spring, Lake Orta,' had captured the delicate lights of that lovely sheet of water.

One of the best of these pictures was Mr. Wybroo's 'Repose: Bachalpsee, near Grindelwald,' distinguished by a beautiful smoothness exactly suited to the subject. Mr. Wilfred Wood had an attractive little drawing, 'A Misty Day, Lake Misurina.' The work of Miss Veronica Lucas was marked by a certain originality of treatment which showed to the best advantage in 'September Afternoon, Lake Annecy,' but she does not seem

to have quite found herself, and her drawing was somewhat defective. Miss MacAndrew showed a pleasant sketch of a lake near the Simplon. Her mountain pictures were also excellent, but we think she might with advantage put more colour into her work.

Miss Rosa Wallis gave us two of her captivating studies of flower-decked alpine meadows, and the alpine flora was also prettily depicted by Miss Thomas.

Miss Helen McAlpine and Mr. Carelli showed Dolomite pictures full of characteristic colour, and some pleasing work was exhibited by Miss Ogle and Mrs. Stephens.

We should not omit to mention an exceedingly interesting chalk drawing of the Grandes Jorasses by Mr. Arnold-Forster. An example of Elijah Walton must have recalled old times to many of our senior members.

Mr. Spencer's work grows more interesting each year. His long experience of photography has made him a master of composition and he chooses his subjects with the eye of a mountaineer. The red seals that appeared on his frames during the exhibition were sufficient signs of the popularity of his work. The 'Petit Dru,' with rolling mists surrounding the peak, and 'Les Charmoz' were his most successful exhibits.

A very interesting set of beautifully executed metal plaques was sent over by Monsieur Jan Joulin of Lyons, in which silver, copper, aluminium and other metals were artistically used to represent well-known mountain scenes. These attracted much admiration and formed a striking novelty in an exhibition of paintings.

The heartiest thanks of the Club are once more due to Mr. Spencer for devoting so much time to getting together such a representative and delightful collection of pictures.

IN MEMORIAM.

COLONEL J. W. A. MICHELL.

(1840-1927.)

COLONEL MICHELL was one of the oldest members of the Alpine Club, to which he was elected, in 1882, on a purely Himalayan qualification. He had a very extensive list of exploration and mountaineering expeditions in the Himalayas, Kashmir, Yarkand, etc., in the years 1860-2, 1864-5, 1869-72, 1875 and 1877. He was

one of the last remaining officers of the old East India Company who were transferred, after the Mutiny, to the present Indian Army.

Colonel Michell served in the Bhutan war, 1865-6, the Duffla campaign of 1874-5, and the Sikkim operations of 1888. At the time of his election to the Alpine Club he was a major in the 36th Bengal N.I., and retired as a colonel in 1897.

He read a paper to the Alpine Club entitled 'Twenty Years' Climbing and Hunting in the Himalayas' ('A.J.' 11, 203 *et seq.*), and another interesting contribution, 'Exploring in Sikkim Himalaya,' will be found in 'A.J.' 15, 111 *et seq.*

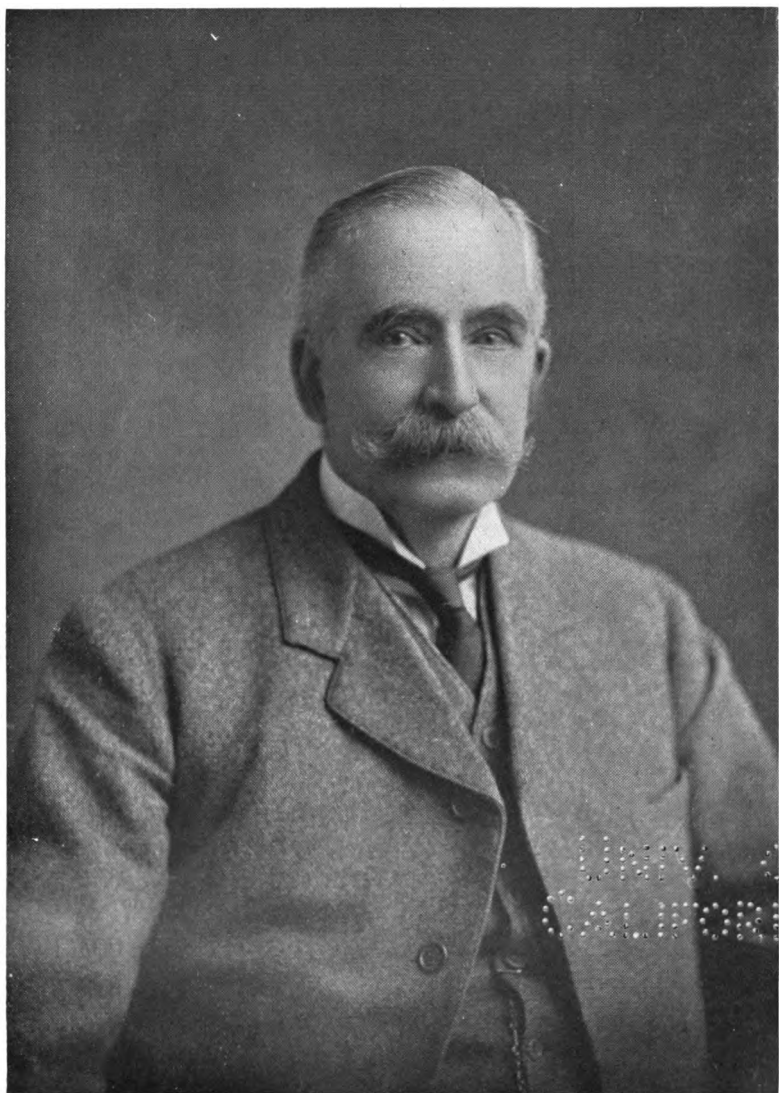
PHILIP FLETCHER.

(1847-1927.)

PHILIP FLETCHER, who died at Worplesdon, Surrey, on June 11, in his 81st year, had been for all his last years a keen member of the Alpine Club. He began climbing late in life: his first season, which included the Breithorn, Monte Rosa, and the Matterhorn, was 1889; but he kept it up for many years, and in 1906, when at the age of 60 he climbed Mont Blanc and made his third ascent of the Matterhorn, he had been up nearly all the recognised peaks of Switzerland, and was a well-known and welcome visitor at many of the climbing centres. At Arolla more especially, which he visited again and again, and where he had climbed every peak round, most of them three or four times, he was a familiar figure. He loved the place, and more than one guide there, as well as the little English Church, benefited by his liberality.

Mountaineering was perhaps the chief of his pleasures: it gave him many happy holidays and a store of memories for his old age. He enjoyed to the full the scenery and the long days in the high air and the sense of strength matched against natural obstacles which is the mountaineer's delight. He had the additional satisfaction of feeling that he could hold his own at the sport with much younger men, who admired his skill and experience and envied his powers of endurance. At the same time his generous appreciation of their activities made him a welcome companion, whether on Swiss mountains or scrambles among the rocks of Wales.

This is no place for an account of his life at home in Lancashire, where he was a member of an old-established colliery firm. But those who knew him in Switzerland will be glad to know that as he was there so he was at home, a genial and generous friend to all alike, interested in other people's doings, and expecting them to be interested in his, with a warm-hearted simplicity of character which endeared him to all sorts and conditions of men and women in the colliery village where most of his life was spent. He was a liberal benefactor of his parish and of the church which his father had built



Phot. T. Chidley.

PHILIP FLETCHER.
1847-1927.

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in it, and many good causes and many individuals benefited by his generosity. Alike at home and abroad he went about doing acts of kindness; he was a man full of sympathetic human interests, with a high standard of personal conduct, a great Christian gentleman.

F. F.

H. D. MINCHINTON.

(1887–1927.)

THERE has probably been no more devoted follower of mountaineering who has worked in the Himalayas than Major H. D. Minchinton of the 1st (K.G.O.) Gurkha Rifles.

Nor do I think, considering the claims on him, and the ties of an officer serving in India, and also taking into consideration that he was a man of very little, if any, private means beyond his pay, that more could have been accomplished by anyone.

He never received outside assistance in any of his expeditions until he joined Major Mason's expedition to Shaksgam in 1926.

Minchinton was entered to mountaineering in Switzerland when quite young, and I believe had the advantage of instruction from the late Mr. C. D. Cunningham.

I do not think that he accomplished anything of special note during the few times that he visited the Alps.

But he had already acquired considerable skill in handling ordinary snow and rock problems before his arrival in India.

He was then lucky enough to be appointed to the 1st Gurkhas, whose station at Dharmsala is on the lower slopes of the great Dhaulī Dhar Ridge which divides the District of Kangra from the Chamba State.

No man with a taste for the mountains could find a more wonderful home, and from that year—1907—until the present year he spent all his spare time in exploring and climbing the mountains surrounding his own station.

But further than that, he was so placed as to be within reach of far grander country beyond the Dhaulī Dhar Range itself.

Moreover, in that regiment there is a tradition of exploration and mountaineering, and Major Minchinton received encouragement from two at least of our members belonging to it, the present General Sir Herbert Powell and Brig.-General E. D. Money, both of whom belong to the Alpine Club.

Major Money joined him in most of his earlier climbs, and between them they trained a considerable number of very useful Gurkha Riflemen.

The climbs done by parties from Dharmsala were often extremely long and trying from the point of view that they were invariably handling new ground.

The peaks on the Dhaulī Dhar Range were conquered one by one, and finally the highest point, now always known as the 'Matterhorn,' was ascended.

All this gave a mixed and varied experience, until just before the War, 1914, when Major Minchinton was enabled to take a longer leave, and pushed his explorations through Bhara Bhanghal into Lahoul and Zanskar.¹ That journey, carried out entirely with the help of his own men, is very typical of what can be done by an expedition not more highly equipped than that of an ordinary officer's shooting trip.

As will be seen by reference to his account, he made a number of very interesting climbs, and covered a great deal of very strange country.

But in that country of innumerable peaks of third-rate Himalayan importance, the points reached and the passes crossed convey very little to the ordinary reader.

There is one point in Major Minchinton's career which is worth referring to. Major Money (as he then was) was able to influence the military authorities to such an extent that a grant was given him to clothe and equip a small detachment of Gurkhas, to train and ground them in mountain work, and to teach them the use of the rope and ice-axe, and how to handle simple snow problems.

Major Minchinton at that time was Major Money's assistant.

However, this training came to an untimely end at the time of the Frontier troubles of 1908, and when normal conditions were re-established the grant was never renewed.

During the War Major Minchinton saw varied service, alike in France, Mesopotamia, Palestine, and on the Indian frontier. He was very severely wounded in the left arm at the Dujaila Redoubt on March 8, 1916, in General Aylmer's last attempt to relieve Kut, and received the Military Cross.

I do not think he ever recovered the full use of this left arm, and it was always a serious handicap to him in the mountains.

Subsequently he visited New Zealand, making some small climbs from the Hermitage. He made also an interesting journey through the hills of Tasmania.²

In 1926 he joined Major Mason as his second in command on his exploration of the Shaksgam, and it is perfectly well known that the success of the party, so far as overcoming the physical difficulties of the mountains was concerned, was due to his knowledge, keenness, and enthusiasm.

It is pleasant to think that he leaves behind him in his regiment some officers who, having profited by his example and enthusiasm, are succeeding him in keeping up the tradition to which he himself succeeded.

C. G. BRUCE.

¹ *A.J.* 28, 382-94.

² *A.J.* 37, 38-46.



H. D. MINCHINTON.
1887-1927.

TO VIND
A. B. B. O. R. A. C.

[Captain J. W. Rundall, 1st (K.G.O.) Gurkha Rifles, writes from Kohima, Assam, dated June 27 :

‘ . . . I hope that you will be able to find space in your next issue for a few words “ In memoriam ” of a very gallant gentleman. . . . Major Minchinton was a true son of the mountains, full of the real spirit of *bonhomie* and *joie de vivre* ; nothing ever seemed to depress him, and his loss to the regiment, both as a soldier and climber, is quite irreparable. On the mountains his pace and endurance were astounding, while as a “ Khud runner ” he could knock spots off men half his age.

‘ He was to have joined me this summer in the Oberland, and we had made extensive plans for the exploration and climbing of the giants of Bhara Bhanghal and Lahoul in happy years to come. . . .]

RAYMOND BICKNELL.

(1875–1927.)

RAYMOND BICKNELL was born on January 3, 1875, and was educated at Wellington College and at Christ's College, Cambridge. After some years of land agency he entered the employment of the Newcastle Breweries, and in 1916 became a Director of that Company. Not long after leaving Cambridge he married Miss Phillis Lovibond, who shared and encouraged his enthusiasm for the mountains.

Norway first attracted him, and while still an undergraduate he had in the course of two summers climbed a number of Norwegian peaks. In 1897 he had a most successful season, during which he made the first ascent of Mjöltnir by its S.W. side (previously descended by Slingsby), the first ascent of the N. ridge of Store Midtmaradalstind (this is still known as Bicknell's route), and one of the earliest traverses of Store Skagastolstind. Then followed ten years during which he could not climb, but in 1908, 1909, and 1911 he was back in Norway. Hitherto he had climbed with Ole Berge or any other guide whom he could pick up, but from 1908 onwards down to 1924 he climbed guideless and as leader of his party. By the end of 1911 he had acquired a knowledge of the Jotunheim which could be rivalled by few and a considerable experience of neighbouring districts. The most remarkable feat of these years, perhaps of his whole career, was the first ascent of the gully between Manden and Kjaerringen, in the course of which he was cutting steps in hard ice continuously for over nine hours.

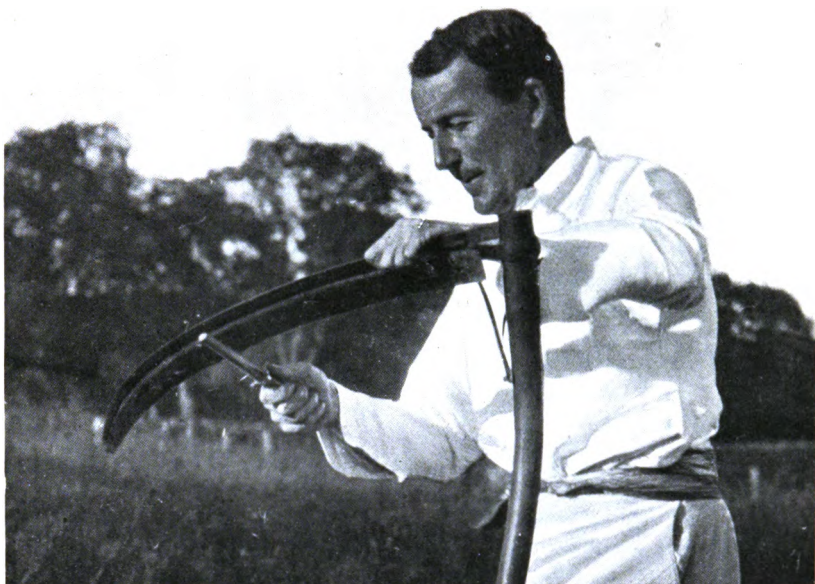
In 1912 he went for the first time to the Alps, and he was so impressed by them and by the more complicated problems of their ascent that he never again returned to Norway. His first Alpine season was spent in the Mont Blanc district, but the weather was so bad that even the ordinary climbs presented conspicuous difficulties.

Next year was better and he made what is believed to be the second ascent of the N. face of the Plan by M. Fontaine's route and found the N.W. ridge of the Ober-Gabelhorn in a condition that gave full play to his icemanship. From this period onwards he went more and more frequently to the Lake District, which could be reached easily from his home, and also made occasional visits to North Wales. He soon became very familiar with the difficult rock-climbing of these districts.

In the early part of the war he was over age for military service, but when the age limit was raised he at once obtained a Commission in a special service battalion of the Royal Marines. From the Armistice to 1924 every summer found him in the Alps. In these years he was at the height of his powers and climbed a large number of the great peaks of the Mont Blanc district, the Oberland, the Valais, the Dauphiné, and the Graians. The season of 1920 was particularly successful, and included a great week during which he made the third ascent of Mont Dolent from France by the Brèche de l'Amône, descended into Italy, climbed the Grandes Jorasses, and returned to France over the Col des Grandes Jorasses. But fate was soon to restrict his physical abilities. In the winter of 1924-5 he all but succumbed first to typhoid, then to appendicitis; phlebitis followed, and for a time it seemed probable that serious mountaineering would not in future be possible for him. In 1926, however, he was again in the Alps, but this time with a guide. Though still somewhat lame he traversed the High Level route and succeeded in ascending some big peaks. In 1927, again with a guide, he crossed a number of passes and peaks from Saas to the Dauphiné and found that his old powers were rapidly returning. He had been going so well that when after a month his guide had to return home he felt himself strong enough to lead his party up the S. Aiguille d'Arves. To those who have climbed with him it must be hardly credible that he can have fallen for any other reason than some sudden physical failure resulting from his illnesses of 1925.

He was elected to the Alpine Club in 1911, before he had ever been to the Alps. From 1920 to 1923 he was a member of the Committee, where his services were of great value, and in 1926 the Club elected him to the Vice-Presidency. In addition to occasional notes he contributed to the *ALPINE JOURNAL* two papers on Norway, entitled 'Two Norwegian Couloirs' (vol. 25), and 'The Horunger' (vol. 34), which every climber contemplating a first visit to Norway should read, and three papers on his Alpine experiences, 'The North-West Ridge of the Ober-Gabelhorn' (vol. 28), 'Mont Dolent and the Col des Grandes Jorasses' (vol. 33), and 'The Jungfrau from the Wengern Alp, Schalligrat, and other climbs in 1923' (vol. 36).

Mountaineering was the dominating passion of his life. When possible he would undertake long and arduous expeditions, the achievement of which would call for the exercise of his full powers.



RAYMOND BICKNELL.



R. B.

J. N.

A FEW HOURS BEFORE THE ACCIDENT.
(S. and Central Aiguilles d'Arves in background.)

TO THE
LIBRARY OF THE
UNIVERSITY OF TORONTO

When these were impracticable he would climb lesser mountains or preferably cross easy cols, for he never liked to tie himself to one centre. When conditions were too bad even for these he would walk over grass passes in rain or snow. When he could not get to the Alps he would go to the Lakes or North Wales. For single days he would go to the Northumbrian hills and moors. No one has more ardently sought the delight of the hard-won ascent, but to him the mountains were not a mere glorified gymnasium. In bad weather as in good he loved their form and colour, the slowly changing perspectives of the long hill walk as well as the near detail of clean-cut slab or delicately moulded snow.

He was in every sense a great mountaineer. Before each season he would plan carefully the climbs he proposed to make and familiarize himself with their history (it was indeed for this purpose that he compiled the index to the later volumes of the *ALPINE JOURNAL* which is shortly to be utilized by the Club). He was a born leader, and in the general plan of campaign as well as in the actual working out of each ascent his friends always followed him readily—even when his arrangements involved such inconveniences as a bivouac without special equipment on the Schallijoch or the ascent of a 4000 metre peak as a training climb. The efficiency which brought him such success in his career was noticeable in his management of the details of the night in the hut and of the early morning start. He had the temperament and the skill of the great master of mountain craft. While his massive build militated against his being in quite the first rank of rock-climbers, there can have been few amateurs who were his equals on ice or as all-round mountaineers. No one who has ever seen it can forget the sight of his purposeful back as with the short pick of his antiquated axe he would cut his way up some formidable ice-slope, or the resourceful caution with which in storm and gathering darkness he would steer his party into safety. The hard common sense which was such a conspicuous feature of his character enabled him to weigh chances and risks in a just balance, and often to snatch a victory where others might have been deterred by apparent rather than real difficulty or by the loudly announced sentiments of their predecessors. For such laurels as fall to the mountaineer he had nothing but contempt, especially when those laurels were earned by expeditions where the dangers were outside the climber's control, or, to use his own words, by 'those mistakes which it has now become the fashion to classify as variations' on great routes.

But beyond this Raymond Bicknell was an original and dominating personality, at once masterful and lovable. He had supreme qualities, a courage to think out his own opinions and to abide by them, combined with human kindness and utter loyalty. He possessed a unique type of humour which he sometimes employed with devastating effect against pretension or sham or slackness of thought. There was a bigness about him—physical, mental,

spiritual—so much so that he seemed to many of us to be almost a permanent part of the universe. Whatever he did he did with his might, whether it were the climbing of a mountain, or the study and photography of medieval architecture, or the organization of a week-end camp with his family on the Cheviot, or even the driving of a motor-car.

Mountaineering no longer stands in need of defence or justification. We know that its risks are small, infinitesimal when compared with the reward it offers. But now here, now there, the great mountains exact their price. In Raymond Bicknell we recognize the essential good, developed year after year by the toil, the struggle, the danger, the beauty of the hills. The foreknowledge that from him some day the price was to be exacted would, we believe, have caused him no hesitation, have drawn from him no complaint. To us remain the memory and the regret.

C. A. E.

PHILIP SCOTT MINOR.

(1861–1927.)

LIKE many other Northern members, Philip Scott Minor seldom, if ever, attended a club meeting with the exception of the Annual Dinner, so that, although elected sixteen years ago, he was probably almost unknown to the majority of members of the Alpine Club. But amongst the mountaineering fraternity in the North of England no man was better known nor more liked than he. He was a general favourite. It was not that he ever did any heroic climb, he was content with the ordinary ‘difficult’ gullies of the Moss Ghyll type for preference. Nor did he rank with his fellow-townsmen, Woolley and Pilkington, as an explorer, but he was a most enthusiastic lover of the mountains and one of the most companionable men who ever walked.

He was probably the most popular man in the Rucksack Club, his sociableness and his never-failing enthusiasm contributed greatly to that club’s success, and he carried the same characteristics into the Fell and Rock Club. In 1918–19 he had the satisfaction of being President of both these clubs at the same time.

He was always a great fell walker and had acquired an intimate knowledge of the Welsh and Cumberland hills. He did not begin rock-climbing till he was turned forty, and climbed in Switzerland for the first time (except for a ‘tourist’ ascent of the Wetterhorn) in 1906. On that occasion, *inter alia*, he traversed Mt. Blanc with two amateurs and a porter. His best season was in 1911, when in a fortnight of good weather he climbed Lo Besso, Zinal-Rothhorn, Ober Gabelhorn, Matterhorn, Monte Rosa, the Dent Blanche, and just missed the Dom through a storm. In that year, his fifty-first, he was elected to the Alpine Club.

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Phot. Alfred Holmes.

MAXIMIN AND PIERRE GASPARD, PÈRE.
(About 1890.)

Of full height and heavily built, he was somewhat slow in walking, and used to say that when at a height of over 10,000 ft. it required a microscope to see him move. But he always 'got there' sooner or later, and it was always a joy to be in his company. In climbing he was steady and absolutely reliable, especially in descending steep rock.

After the War he visited the French Alps two or three times, contenting himself with the smaller peaks, but he continued to visit our own hills at every opportunity, and raised his total number of ascents of Snowdon to about 120, including three ascents in one day at the age of fifty-seven.

It may be mentioned that he held the degree of LL.B. (London University). He had to wait for his final examination some time because he was too young, and in due course he passed first in all England.

H. E. S.

MAXIMIN GASPARD.

(1864-1927.)

FEW of us who have seen this famous guide in recent years would have recognized in that paralysed form the once picturesque and athletic figure, the dominant personality and 'splendid swagger' so characteristic of Maximin, second son of Pierre Gaspard. For, in the heyday of his renown, some 30 years ago, he stood in Dauphiné in a class almost by himself. His one possible rival, often his companion, was his cousin, the still active Joseph Turc, 'le Zouave.'

If, at that date, practically all the great Dauphiné peaks had been conquered, still, the early nineties were the epoch when climbers began to seek out the most difficult routes, and in that pursuit Maximin became pre-eminent. He was the leader of some of the most adventurous mountaineers of the period, of whom the best known are MM. C. Verne, A. Reynier, Eugène Gravelotte, and our own members, Messrs. F. E. L. Swan and Alfred Holmes.

The following is a list of some of Maximin's most important first ascents or new routes :—

Pic du Glacier Carré

¹ La Meije (by the W. arête and N.W. face ; from the N.)

Brèche Joseph Turc

Brèche Maximin Gaspard

Grande Ruine (W. arête)

Pic Bourcet (N.E. summit)

Roche Méane (Tête Carrée)

¹ Les Écrins (from the Glacier Noir)

¹ According to my friend Monsieur Lory, Maximin had made 60 ascents of La Meije and Les Écrins, respectively.

Mont Pelvoux (from the N.W., Glacier Noir)
 Le Coup de Sabre
 Col du Glacier Noir
 Les Bans (from the S. ; from the W., or Valgaudemar)
 Vaxivier
 Les Rouies (from the S.)
 Pic d'Olan (N. summit, from the S.)
 Pic des Souffles (first ascent of all three summits)

while, outside Dauphiné, his greatest exploit was probably the first traverse of the dangerously rotten arête connecting the Grande Casse with the Grande Motte. This expedition, like many others included in the list above, has never been repeated.

Maximin was above all a 'Dauphiné' guide; he never left it willingly, and, it must be confessed, was never as great a leader when away from his own mountains.

As a rock climber he was brilliant in the extreme as well as absolutely safe. On ice and snow, like most Dauphiné guides, he was little more than mediocre. As a pathfinder or discoverer of routes he has seldom been surpassed. The writer will always remember his graceful and rapid execution of any rock problem, and no cragsman was ever more finished in his movements. His younger brother, Dévouassoud, carries on the family traditions.

Like all of us, Maximin had his faults. A born leader of men and expeditions, completely fearless, he was often overbearing in manner and reckless in execution. Success was only too apt to carry him off his feet. Still, with many virtues, one could easily forgive what were almost *les défauts de ses qualités*.

He died at St. Christophe on June 5 last. Death, after such prolonged suffering, must have come as a relief.

The name of Maximin Gaspard will live. The Glacier Noir's incomparable *cirque*, grandest and grimmest scene of the whole range of the Alps, will, ages hence, bear testimony to his deeds.

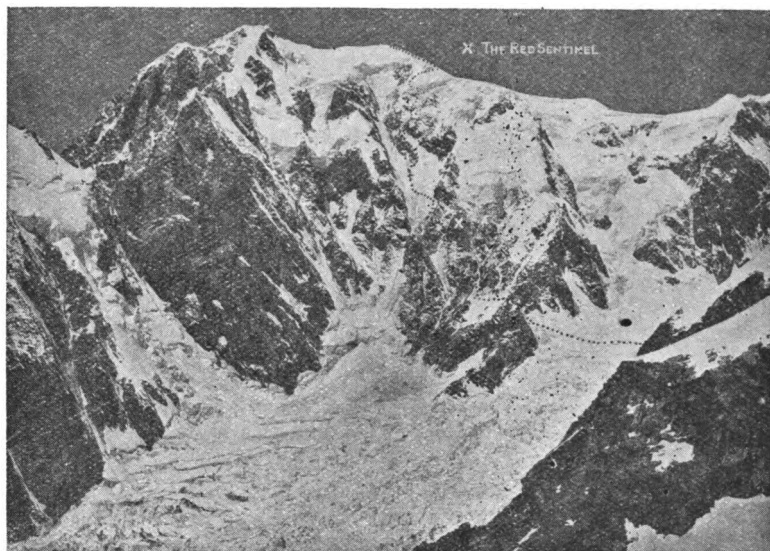
E. L. S.

NEW EXPEDITIONS.

Mont Blanc Group.

MONT BLANC, 4810 m. = 15,782 ft., B.I.K., FIRST ASCENT DIRECT FROM THE BRENVIA GLACIER. September 1-2, 1927. Messrs. F. S. Smythe and T. Graham Brown. Left Torino hut 03.30 *en route* to Col du Trident and Upper Brenva Glacier. It was decided on account of soft snow on Glacier du Géant to postpone the ascent for 24 hrs. and ascend the Tour Ronde, whence it is possible to see the lower part of the face, which is invisible from the Torino hut. Ascended from Géant Glacier to E. Col de Toule and traversed

frontier ridge to first prominent point of Aiguille d'Entrèves. Descended to Glacier du Géant and ascended steep slopes to E. arête of Tour Ronde. From this point the lower part of the climb was examined and a decision made to press on owing to good snow on southerly slopes. Traversed horizontally across steep S. face of Tour Ronde, thereby saving possibly 2 hrs. Traversed arête to Col Ouest de la Tour Ronde and descended to Brenva Glacier. Climbed short steep slope to the little col at the foot of the Brenva arête (Moore's arête), for which the name *Col Moore* is suggested. Ascended a sharp steep snow arête to broken rocks below the first



BRENVA FACE OF MT. BLANC.
Showing Mr. Smythe's route.

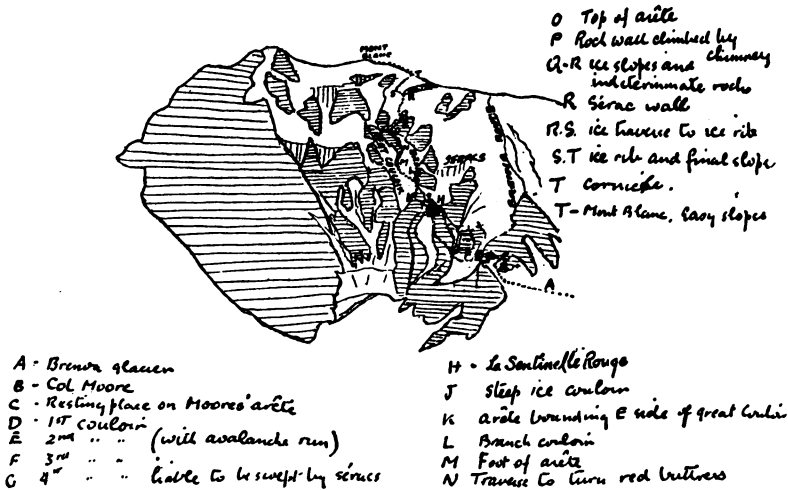
great step on Moore's arête (14.00). From the Tour Ronde a prominent red buttress with a perpendicular face had been observed on the face of the mountain. The base of this buttress, for which the name *La Sentinelle Rouge* is suggested, seemed to give promise of the most secure bivouac place on the Brenva face and was made the objective of the first day's climb.

Waited on Moore's arête until sun was off the face; stones had ceased falling and snow safely crusted. Left at 16.53 and commenced traverse across the face. Crossed four couloirs over good snow—a deep ice avalanche run was crossed in the middle of the second couloir. The last couloir, which is liable to be swept by séracs, was crossed at 18.25 in a few seconds to sheltering rocks, where a short halt was made. An upward climb over steep ice and snow sprinkled with rocks

led to the base of the 'Red Sentinel' at 19.10. This place was found to form an ideal and safe bivouac site. The altitude is estimated to lie between 3600 and 3700 metres. A bitterly cold but fine night was passed, and climbing recommenced at 05.30 in perfect weather. After ascending under W. side of the 'Red Sentinel,' a steep ice couloir was crossed to the ridge bounding the E. side of the huge couloir which cleaves the face. *Descended* from this ridge to the couloir and climbed very steep snow and ice under the W. side of the ridge until almost level with the foot of a ridge, which splits the couloir into two branches. Crossed the right-hand (E.) branch over an avalanche groove to the ridge. Ascended steep ice, snow, and scattered rocks to the foot of the steep red buttress, at which the ridge becomes very definite (07.10).

A party which has once reached this point is safe from falling stones and ice for the remainder of the climb. During the two days on the face not more than half a dozen small stones were observed to fall, and at night one ice avalanche passed to the E. of the 'Red Sentinel.' Halted and left at 08.10. Turned the red buttress on difficult rocks to the right. Steep ice led back to the crest of the ridge, the snow and rocks of which were followed until the line of ascent was again forced to the right over a nasty traverse on very steep ice. Again ice and snow led back to the ridge, which could be followed on good rock to the top of the ridge (10.30). Built a small cairn and rested 45 mins. (altitude about 4200 m.). The ridge ends in a snow and ice crest, which separates the top of the branch couloir from a small couloir falling into the main couloir. This crest abuts against a steep cliff, which was forced by a slanting chimney. The upper ice and rock slopes were reached above this cliff. The ice was covered by slushy snow, and was found to be of exceptional hardness—similar to that on the top of the Brenva. A way was threaded up indeterminate slabs by a series of ascending traverses to the right and left on this ice. The line of ascent was forced to the right until almost beneath the final great sérac wall. The final rocks were reached just under the S.W. end of this wall, where it is comparatively low and changes direction round a shoulder, to run directly towards the summit of Mont Blanc above the head of the great couloir. Traversed very steep ice to the left to a rounded and ill-defined ice rib. This ice rib runs directly up the final ice slope to the left of the sérac wall. Fortunately 2-3 ins. of frozen snow were found on the N.E. side of the ice rib, which gave just sufficient purchase to crampons and thus obviated the several hours' cutting that had seemed in prospect. Ascended this rib until the sérac wall could be easily turned. Easier slopes led to an incipient corniche crossed at 15.30, about 400-500 ft. below the summit of Mont Blanc. The summit of Mont Blanc was reached without further difficulty at 16.15, and the Vallot hut at 17.30, where the night was spent. *Descended* next day *via* the Aiguille du Goûter and Tête Rousse.

The climb is of varied and exceptional interest throughout. The scenery, especially the near views of the Brenva face of Mont Blanc de Courmayeur, the Pétéret ridge, and the great couloir are of the grandest character. The standard of difficulty is continuously high and the angle averages about 50° for this face, while much of the upper part is steeper. The rock throughout is of the finest quality, a grey-red granite, and this accounts for the few falling stones. The ice-swept couloirs on either side of the 'Red Sentinel' are exposed, but the traverse is perfectly justifiable if taken early or late in the day. Late in the season the séracs appear to be remarkably safe, and only one ice avalanche occurred. Crampons (we



were 'Eckenstein,' 10 point) appear to be absolutely essential to speed and consequent safety. The keys to the climb are the little 'Col Moore' and the secure bivouac place beneath the 'Red Sentinel.' As the latter dominates the lower part of the climb and makes it a possible and safe one, we propose to name the expedition *Route de la Sentinelle*.

LES COURTES, 3855 m. = 12,641 ft., B.I.K., FROM THE S. (GLACIER DE TALÈFRE). September 10, 1927. Messrs. F. S. Smythe and T. Graham Brown. Delayed in leaving Couvercle hut owing to bad weather early. Left hut 05.50, a pause for breakfast being made before reaching glacier. Ascended Glacier de Talèfre to foot of buttress leading to summit ridge of Les Courtes a little to the E. of the summit, and between it and the Aiguille Croulante. Turned the steep and glaciated rocks at the foot of the buttress on the E. by ascending the couloir on that side to a short distance below the

bergschrand, and then climbing a steep, narrow chimney followed by a short wall marked by a rock flake to the crest of the buttress, near the summit of a conspicuous scree slope. Thence the buttress was climbed throughout as much as possible on the right towards the couloir on the E.; 200–300 ft. of easy rock led to the foot of a curious bent crack, avoidable, if necessary, on the left; 1000 ft. of easy scrambling led towards the foot of a conspicuous tower, about 100 ft. below which the buttress constricted to a narrow and difficult ridge. Good climbing on firm rock led to the base of the tower, which was turned to the W. over snow-masked slabs. The arête was gained above the tower, and was followed over broken rock and soft new snow without difficulty to the summit ridge, which it joins about 15 ft. below the summit of the mountain. Summit at 14.30. Descended *via* Col de la Tour des Courtes over very bad snow to the Couvercle hut and the Monteners, 22.15.

AIGUILLE DE LESCHAUX, 3770 m. = 12,365 ft., B.I.K., BY THE N.W. FACE. August 3, 1927. Mr. R. Ogier Ward, with Joseph Georges, *le Skieur*. Leaving the Couvercle at 02.40, the party traversed the Glacier de Talèfre to the Pierre à Béranger, then up the Glacier de Leschaux, bearing left into the basin below the Peak. This last part of the glacier could only be passed by bearing well to the left, close to the rocks of the Aiguille de l'Éboulement, thence across the glacier to the rocks of that arête, represented on the B.I.K. map as descending from near Pt. 3517 m., reaching some rocks a little to the N. of the bottom of this arête at 06.30, thence across snow to the arête, and following this, sometimes on the crest, but chiefly on its S. slope, we presently reached a point below and to the right of the snow, which forms a noticeable inverted triangular patch, when the mountain is viewed from any point to its W. To this snow patch a large couloir descends; it lies behind the main arête which I have mentioned, and cuts it off from the very perpendicular W. face of the mountain. It is only possible to see into this couloir from the Grandes or Petites Jorasses. It is of considerable depth and width, but stones do not appear often to fall down it, probably because the quality of the rocks of the mountain is similar to that of the Grépon, and loose stones are very few.

We crossed below the snow patch on to the true right bank of the couloir, then up a little chimney level with the middle of the snow, and were now climbing along the inside or S. wall of the main arête; *i.e.* we were in the couloir, fairly high up on its true right bank, a little below the crest of the arête. We continued up this for about 50 mins., and at 10.00 reached the point where the arête ends by joining the face of the mountain at the top of the couloir. At this point the climb extends up the face of the mountain; this was difficult, the rocks being steep and slabby; by this in about 1 hr. we arrived at a very narrow, almost horizontal ridge of rocks, which runs S.E. and forms the last step which can be seen from the W.

to meet the main mass of the mountain at a point where the final vertical cliff descending from the summit joins a long chimney which passes almost vertically for some distance down the steep W. face; after climbing along this ridge we were able to traverse to the right until we were on the W. face of the mountain, just below the summit, and then ascend without much difficulty, reaching the top at 13.30. The rocks of this last step were also difficult.



N.W. FACE OF AIGUILLE DE LESCHAUX.

We left the summit at 14.00, and descended by the ordinary route to the Glacier de Frébouzie until 15.20, keeping close below the cliffs of the Petites Jorasses. We then mounted the glacier to the summit of the Col des Hirondelles, arriving there at 17.15.

We began the descent from the col at 17.35, and found it difficult and dangerous, the rocks being of a very poor quality, so that great care was necessary to avoid dislodging stones. There was also some risk from stones falling down the couloirs between the rock ribs. We crossed the bergschrund at the foot of these at 20.00, and reached Montenvers at 23.10.

While climbing high up on the face of the mountain about $\frac{1}{2}$ hr. below the final step, we found a piton, and above this recent axe-marks in several clefts in the rocks, and a cairn on the final step itself. These, we heard afterwards, were made by an Italian party some days before, who appear to have made the first ascent or descent of the mountain from Italy *via* the Col de Leschaux, probably by the N. arête, and to have been forced on to this face by the difficulties of the arête itself, which must be considerable. We found their descending tracks in the snow, leading down from the summit to the Glacier de Frébouzie. There were no tracks, old or recent, on our route below the piton, either on the rocks, except for about 50 ft. beneath it, or on the névé of the Glacier de Leschaux; it seems that near the position of the piton the two routes converge, and this is about $1\frac{1}{2}$ hr. below the summit.

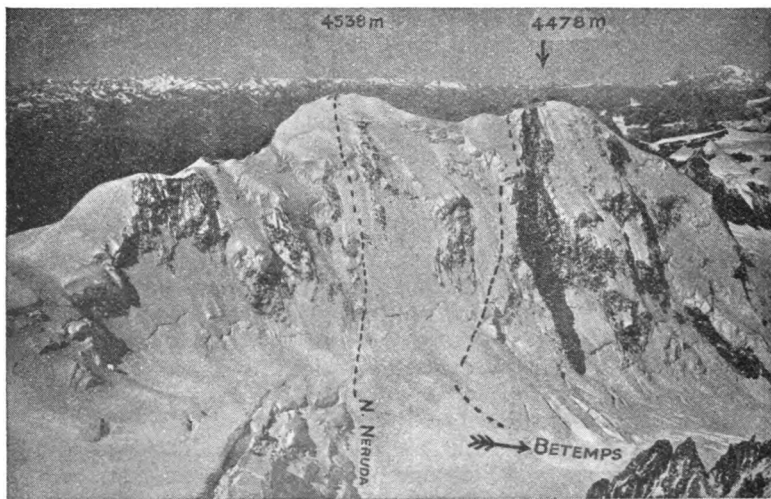
It should be noted that the N. slope of the arête leading E. from the summit of the A. de Leschaux, towards Monte Gruetta, is extraordinarily steep above the Triolet Glacier, far steeper than the map suggests.

The climb is a very fine one, the rock as good as that of the Grépon, and in many places exceedingly steep. Joseph Georges put it as intermediate in difficulty between the traverse of the Grépon and Grands Charmoz.

R. O. W.

Pennine Alps.

LYSKAMM W. SUMMIT, 4478 m. = 14,690 ft., BY THE N.E. FACE. August 5, 1927. Monsieur E. R. Blanchet, with Kaspar Mooser and Josef Aufdenblatten. The height of the face is more than 3000 ft.,



Photo, Werhli.]

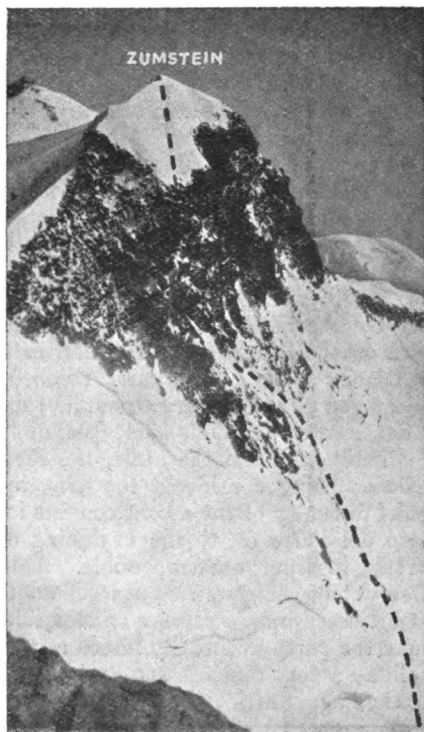
N.E. FACE OF LYSKAMM.

Right-hand route is M. Blanchet's.

set at an average angle of 55° . No rocks were touched throughout. Two easy bergschrunds were crossed low down. At a height of about two-thirds of the slope a traverse was made to the right (W.), in order to cross a bad heart-shaped outcrop of séracs. This traverse, which was only about 100 ft. long, took 1 hr. Higher up the angle eases off to 30° , but steepens again after a long oblique crevasse—easily crossed. The watershed was attained some $\frac{1}{4}$ hr. from the summit. The conditions were so good that no step-cutting was necessary except on the traverse. Times: base of face, 06.25; watershed, 11.35; summit, 11.50.

[This appears to be the first time that any part of the main N.E. face has been touched since the late Mr. Norman Neruda's ascent of the E. summit with Christian Klucker and the late Josef Reinstadler, August 9, 1890, 'A.J.' 15, 307, 441.]

ZUMSTEINSPITZE, 4573 m. = 15,004 ft., BY THE W. FACE.
August 30, 1927. Same party. Height of face, 1000–1100 ft.;



W. FACE OF ZUMSTEIN.
Showing M. Blanchet's route.

very steep—in fact, steeper than N.E. face of Lyskamm. Base was all ice, the second half rocky and with a kind of spherical ice-cap just below the summit. The bergschrund at the base was attained at 07.30, commencement of the rocks 10.50, summit 12.20. First 2 hrs. gave very arduous step-cutting, followed by vertical and insecure rocks. A crevice in these rocks, at first difficult, then easy, was scaled, followed by easy snow on the final cone. Ascent very dangerous from falling stones.

[This route is quite different from Route '2' in *Alpes Valaisannes*, iii., p. 94, where a serious error in the translation of an article in 'R. M.' has been made. The entire question will be thrashed out shortly in *Die Alpen*.—E. R. B.]

Bernina (W. Wing) Group.

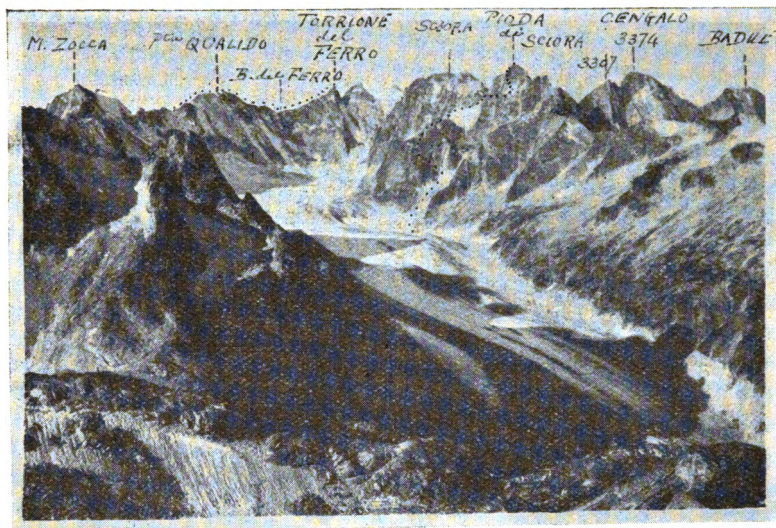
PUNTA PIODA DI SCIORA, 3238 m. = 10,624 ft., *S. map*.¹ July 3, 1927. Herr H. Rütter, with Chr. Klucker, made the first ascent of this peak *via* the N. slope of the E. arête, and by the latter to the ordinary traverse of the E. face. The broad snow couloir leading up to the arête, between Punta Pioda and Sciora di fuori (danger from falling stones!), was mounted to the lower of two névé ledges which traverse the N. slope of the E. arête diagonally upwards from N. to S. The E. arête was gained over steep névé and snow-covered slabs, and followed to the ordinary route. Much snow on the rocks made very careful going necessary.

This, the direct route from the Albigna glacier, is very interesting and of moderate difficulty. Some danger from falling stones in the lower part of the ascent.

TORRIONE DEL FERRO, 3234 m. = 10,611 ft., *S. map*,¹ BY THE E. ARÊTE. July 5, 1927. Herr H. Rütter, with Chr. Klucker, made the first ascent by the E. arête of this imposing rock tower, which is situated on the Swiss-Italian frontier, in the S.W. corner of the Albigna Glacier valley. The party reached the Bocchetto del Ferro, the deep gap between Ferro Orientale [or Punta Qualido] and Torrione del Ferro, *via* Colle del Qualido, Passo Qualido Nord, and W. summit of Ferro Orientale, the direct ascent from the Albigna Glacier being considered too dangerous from falling stones. The chief difficulty of the ascent consists in getting up out of the Bocchetto del Ferro on to the beginning of the E. arête. The rocks directly in front are impossible. A traverse on the Albigna side was out of the question, at least under obtaining circumstances; small insecure snow patches on steep slabs. Remained the S. side, where the party eventually forced a passage up smooth perpendicular cliffs—a very difficult and exposed climb, which was effected *without* the help of artificial means (pitons).

¹ These heights are taken from the *new* Siegfried map, sheet 523, 'Castasegna,' 1927.

The great obstacle of the gap once overcome, the rest was plain sailing. The party traversed the snow-covered ledges directly under the arête. There was much snow at a very steep angle, in some places nearly perpendicular, the whole traverse very exposed through-



ALBIGNA GLACIER.
Showing Herr Rütter's 1927 routes.

out. At 14.45 the summit was attained, 11½ hrs. after leaving the Albigna hut.

The party returned by the same route, and reached the Albigna hut at 23.00.

'Kletterschuhe' would facilitate considerably; the snow prevented their being used.

H. RÜTTER.

Drakensberg, Natal.

ASCENT OF POINT ON MAIN DRAKENSBERG RIDGE (c. 10,500 ft.), N. OF CHAMPAGNE CASTLE. July 15, 1927. Messrs. G. F. Travers-Jackson and O. K. Williamson. Party left a camp close to the stream in the Hlwazeni Valley, about 10 mins. below that used for the attempt on Cathkin Peak, at 07.10. They ascended to a very well-defined gap in the main Drakensberg ridge, in a direction rather S. of W. from the camp. It is understood that this gap is the one which is crossed to the Basutoland plateau in the ascents of Champagne Castle and is called Grey's Pass. To reach the gap they traversed slopes on the true right of the gully leading up to it,

so as to avoid a waterfall, and only ascended the upper 300 ft. or so of the gully itself. The gap was reached in $4\frac{1}{2}$ hrs., excluding halts, from the camp. It is adorned by a well-marked cairn. After traversing the gentle Basutoland slopes on the other side and ascending Champagne Castle, the gap was again reached at 16.52. The peak, which rises immediately on the N. side of the gap to a height of perhaps 200 ft. above it, was now climbed by grass and loose rocks on its W. side, a final easy rocky wall about 20 ft. in height leading the climbers to the summit at 17.00. A cairn was erected. It appears to be about the same height as Cathkin Peak. A very grand view was afforded of Cathkin Peak, Monk's Cowl, and the peak on the S. side of the gap from which the party had ascended. Descending the same way to the gap, the morning's route of ascent was approximately followed, camp being regained by aid of the fitful light of the moon at about 20.40. From the opposite side of the Hlwazeni valley, and from the camp, the peak appears as a well-defined more or less rectangular rocky mass, and the ridge running northwards from it appears gradually to fall in height. The climbers propose for it the name of *Bastion peak*.

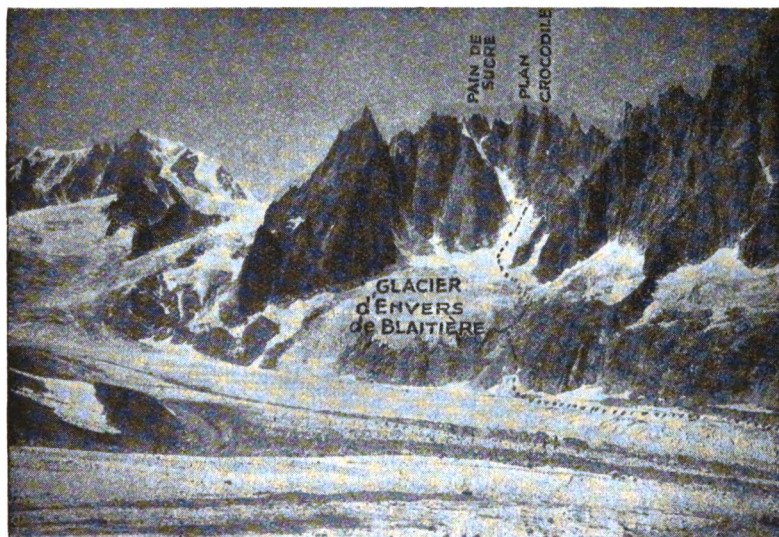
VARIOUS EXPEDITIONS.

Mont Blanc Group.

AIGUILLE DU PLAN, 3673 m. = 12,051 ft., B.I.K., SECOND ASCENT BY E. FACE (Ryan's route). July 24-25, 1927. Messrs. F. S. Smythe and J. H. B. Bell. This ascent was first made by Captain V. J. E. Ryan, with Franz and Joseph Lochmatter, in June 1906. No description has hitherto been published, but Franz Lochmatter states that he considers this route to be the finest in the Aiguilles.

Left Montenvers at 02.30. Ascended ice-fall of Glacier d'envers de Blaitière mainly by the broken, easy rocks on its N. side. Easy snow slopes led to three large schrunds which traverse the upper bay of the glacier at the foot of the great couloir dropping from the Col du Pain de Sucre. The lower two offered no difficulty, but the upper and true bergschrund was turned with difficulty under the rocks on the right. An ice traverse led to the foot of the couloir falling between the Plan and the Dent du Crocodile. Ryan's party gained the great buttress falling from the summit of the Plan low down near the foot of this couloir, but the present party found this impossible owing to icy rocks, and were forced to continue up the couloir, which was climbed with great difficulty over snow and ice-covered slabs for a considerable distance, keeping as far as possible on the left to avoid falling stones and ice. Above these slabs steep ice led to shelter beneath a conspicuous overhanging rock face beneath the buttress of the Plan. Rested and had a meal. Owing

to the icy rocks on this the sunless side of the buttress, it was still not possible to gain its crest, and the party was forced to cut directly up the long ice slope which slants up from the couloir to the crest of the buttress, which it joins at about half its height. Five hours of exacting cutting on ice of the hardest quality covered with powdery snow, and so steep as often to necessitate handholds, brought the party to the crest of the buttress at approximately 15.00 hrs. The rocks of the buttress, which often more nearly resemble a narrow rib, are severe throughout. In one exceptionally severe 80-ft. holdless crack the leader lost his axe. The rock is wonder-



A. DU PLAN, SHOWING MR. SMYTHE'S ROUTE.

fully sound, and the climbing consists almost entirely of clean-cut cracks with little hold between smooth granite slabs. Bivouacked at 18.00 on the only suitable ledge seen on the climb at a point approximately 800 ft. from the summit. Perfect weather and a comfortable night in a Zdarsky tent sack. Left at 07.00 in a warm sun, and commenced climbing the series of cracks. Unstable snow edges were sometimes present on the crest, and considerable time was lost in flogging these away before advance could be made. An 100 ft. final step was turned by a traverse across slabs to the left, and a most difficult thin crack in which it was just possible to insert the fingers and which the leader only found possible in bare feet. The final 80-ft. chimney was filled with ice, but a crack in its right wall offered the solution. An unexpected and delightful traverse to the left from the upper chock-stone in this chimney led to easy rocks

and the summit at 15.00 hrs. Descent was made by the ordinary route to the Montenvers.

There is no doubt that bad conditions added greatly to the difficulty of this climb, but the rock climbing and ice work were of the most continuously exacting standard the party had ever experienced. Captain Ryan's route over the lower portion of the climb is to be preferred to the present party's, as the Plan-Crocodile couloir is exceedingly dangerous from falling stones, corniches, and ice. The lower rocks of the arête offer, according to Franz Lochmatter, extreme difficulties, and it was only by standing on each other's shoulders and making a human ladder that Captain Ryan's party were able to climb one step. To those who know the climbing ability of the Lochmatter brothers this will no doubt speak for itself!

AIGUILLE BLANCHE DE PÉTÉRET, 4109 m. = 13,482 ft., B.I.K. Aug. 10-11, 1927. Messrs. F. S. Smythe and G. Graham Macphee. Left Courmayeur 08.45 in good weather. Arrived Gamba hut, 13.30. Left hut, 17.15. Col de l'Innominate, 18.35. Crossed intricate ice-fall of Fresnay Glacier to foot of couloir falling from 'Col des Dames Anglaises,' 20.15. The large bergschrund turned on left and couloir gained by a traverse above the bergschrund. Using Eckenstein crampons, climbed the hard and sometimes icy snow of the couloir to within 150 ft. of the col, where it is necessary to leave the couloir and traverse across the W. face of the Aiguille Blanche. Rocks very loose. Climbing by brilliant moonlight continued by a series of upward zigzag traverses on difficult rocks. At 02.00 moonlight failed. Bivouacked on a ridge connecting an outstanding pinnacle with the main W. face. Left at 05.30. Struck main S. arête too high and had to descend some way on the E. face in order to turn Grand Gendarme. Kept as high as possible to avoid falling stones, which constantly raked E. face. Considerable difficulty experienced in crossing a narrow, deeply cut ice-filled couloir. Weather meanwhile was rapidly changing for the worse, but decided to go on to Col de Pétéret rather than risk the long, difficult, and dangerous return *via* the Col des Dames Anglaises. Summit of Aiguille Blanche in bad weather at 13.00 hrs. Descended in storm to Col de Pétéret, 15.00. A hurricane was then blowing on Mont Blanc and a *tourmente* on the Col de Pétéret. Descended to Fresnay Glacier by the great rocky bastion, roping down several times on the smooth and difficult rocks. Danger was occasioned by stones blown off the rocks above by the hurricane. Descended Fresnay Glacier directly to Col de l'Innominate, and were helped down the sérac wall by steps cut by Josef Knobel in prospecting the route to the Col de Pétéret for Mr. Eustace Thomas's party. Descended from Col de l'Innominate in a terrific thunderstorm—the same storm that produced a cloudburst over Montreux. Arrived Gamba hut, 21 hrs.

This descent from the Col de Pétéret is probably the first save the fatal one of Professor F. M. Balfour and his guide J. Petrus ('A.J.' 11, 90-91).

MONT BLANC, 4810 m. = 15,782 ft., B.I.K., *via* COL MAUDIT (Gugliermi's route). Aug. 14, 1927. Messrs. F. S. Smythe and G. G. Macphee. Left Torino hut in brilliant moonlight at 00.30. Crossed bergschrund without difficulty at 02.30. Using Eckenstein crampons climbed steep hard snow to a conspicuous rock-tongue in the couloir. Good sound rock gave fine climbing till almost under the great sérac wall that defends the col proper. Kept too far to the left, and after difficult climbing on icy rocks traversed to the right, where a large cairn was found. Steep rock with good holds led up to the right of the sérac wall, finally petering out in a snow and ice slope which led without further difficulty to the crest of the sérac wall and the col at 06.35. Summit of Mont Blanc du Tacul at 07.45. Left, 08.15. Mont Blanc in a *tourmente* at 12.30. Montenvers *via* Plan des Aiguilles, 18.00 hrs.

This is believed to be the first ascent of Mont Blanc from the Torino hut by this combination, and it is the third ascent of the Col Maudit from the Géant Glacier.

AIGUILLE DU PEIGNE (3192 m. = 10,474 ft., B.I.K.). The Editor tells me that this ascent, although very frequently made, has never yet been described in the *ALPINE JOURNAL*.

Our party, Mr. C. G. Crawford and myself, with Pierre Blanc and his son, Alphonse, left the Plan de l'Aiguille at 05.15, September 6, 1927. The ordinary route, which we took, lies up the couloir descending to the Glacier des Pèlerins from the 'Col' du Peigne. Keep to its true left bank for a short space, then cross the bed and ascend a sort of arête on the right bank to a spot suitable for rest and refreshment, overlooking the couloir. This first third of the couloir took us just 1 hr. from the foot of the rocks. It is neither very easy nor very difficult. We then descended into the couloir by a *rappel*, and proceeded up easy rocks on the left bank to a point where two subsidiary gullies unite with it. From this point one can *either* continue up the couloir to the Col du Peigne, still keeping to the easy rocks of its left bank (some loose stones); *or* else, though not quite so easily, one can omit the col, crossing the couloir to its true right, and climbing straight to the foot of the final chimney which leads to the crest of the ridge above the col. We took the latter route on the ascent, the former on the descent. The point of bifurcation is about two-thirds of the way up the couloir. The chimney, which must be taken in either case, and which is reached from the col by a zig-zag, is steep and exposed, and its difficulties increase as one climbs higher. The rock in it at one point was not so firm as one would

like it to be. From the top of the chimney a short but exposed and rather difficult stretch of slabs lands one on the first peak. From there to the summit is a diverting and aerial scramble along an *arête*, without difficulty, save for the descent into the last gap, which requires a short *rappel*. The summit was reached at 11.05, the rocks having taken 3 hrs. 40 mins. actual going. We got to the foot of the couloir at 16.00, the descent occupying much the same time as the ascent. The bed of the couloir should be avoided as far as possible, as stones fall in it.

E. V. SLATER.

AIGUILLE DE GRÉPON (3482 m. = 11,424 ft., *Vallot*). By the W. or Nantillons face (Ryan's Route). August 13, 1927. MM. J. Lagarde and H. de Ségogne. From the Nantillons glacier go up the Charmoz-Grépon couloir till you are level with the higher of two diagonal ledges seaming the W. face of the Grépon. Cross the couloir and take this rocky ascending ledge composed of mixed rock, ice and snow. The ledge, on the outer side of which is a little rocky crest, can be described as half ledge, half gully. Go up it and scramble, about midway up, over an icy step and rocky knobs; at this point the angle increases and approximates to 55° for about 100 ft. You now soon arrive at the spot where the 'Dunod' route falls in, some 65 ft. below the Grépon-Balfour gap. Attain this gap and *descend* to the foot of the Dunod chimney, whence the slab and the Lochmatter chimney,¹ followed by the summit crack, lead you to the top (4-4½ hrs. from the bergschrund).

The only 'rock' difficulty of this route is the Lochmatter slab. Your instinct is to try and cross it by placing your feet in a little horizontal crack. You must, however, grasp it with your hands, otherwise you are sure to get pounded about 3 ft. short of the chimney, owing to the gradual splay-out of the crack. Consequently, you must *descend* a little below the platform at the base of the Dunod chimney so as to reach a little nearly perpendicular 'gutter' rising in a corner (*dièdre*). Cross a slab and climb the gutter by minute holds till you attain a shallow horizontal crevice flattening out gradually to your *left*. (This crevice is somewhat vaingloriously described as a *ledge* in the account, *Vallot*, I, p. 67.) By means of this crevice you can scramble over a second slab which still separates you from the base of the Lochmatter chimney. Two small, almost invisible, knobs are very useful as footholds.

In snowy summers like 1927, it is a curious fact that you can get by this route to within 130 ft. of the summit of the Grépon, almost entirely over *ice*!

¹ The slab and Lochmatter chimney were first climbed by Messrs. L. W. Rolleston and H. C. Bowen with Josef and Gabriel Lochmatter. *Gabriel* led. August 26, 1913, *A.J.* 28, 83-4.

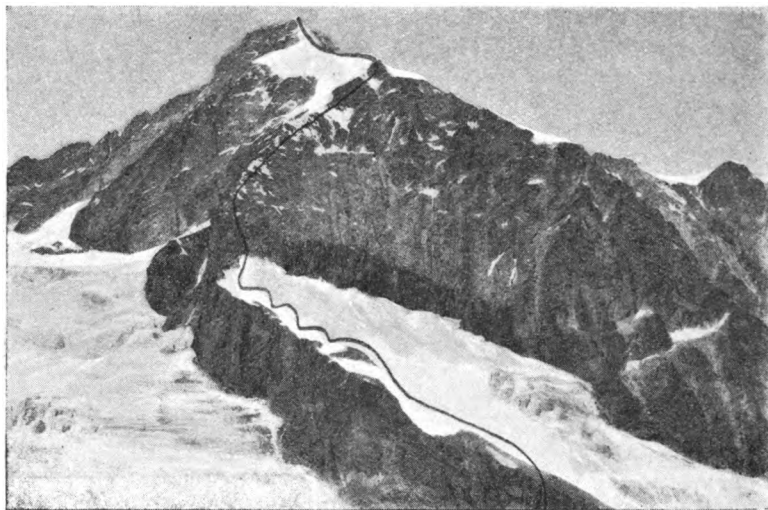
This route was taken first, both in the ascent and descent, by Captain V. J. E. Ryan with Josef and Franz Lochmatter in July, 1914 ('A.J.' 29, 200; with two marked illustrations). MM. Fallet and R. T. de Montcel made the second ascent in 1926 (G.H.M. *Annuaire*, 1927, p. 71).

On the day of our ascent the Grépon was for the first time climbed simultaneously by its two faces and two arêtes. One party scaled it by the Mummery route, another from 'O.P.,' ours by Ryan's route, while Madame Helburn and Miss O'Brien with Armand Charlet and [?] Alfred Couttet climbed the peak, by Young's Mer de Glace route, in remarkably short time.

J. LAGARDE.

Pennine Alps.

GRAND CORNIER, 3969 m. = 13,022 ft., BY E. ARÊTE, attained from the N.E. July 15, 1927. Mr. and Mrs. G. W. Murray, with



GRAND CORNIER, SHOWING MR. MURRAY'S ROUTE.

Théophile and Hilaire Theytaz. Owing to threatening weather, the start from Mountet was delayed till 03.30, and the party roped at 04.00 on the Durand glacier. Crossing the glacier, some steep ice-worn rocks led up to the glacier-covered ledge descending from point 3191 m. at the foot of the E. arête. Many tracks of chamois were seen on this glacier. 3191 m. was reached about 06.45, and the steep cliff 'overhanging' this point climbed just to the left (S.) of a couloir which breaks it near this point. The E. arête was then

followed till about 10.30 on rocks of no particular difficulty, and then on very bad snow, which was again deserted for rocks about 11.15. The point where the N.E. arête falls in was reached at 12.00. Thence to the summit in 3 hrs., a series of corniches near the top making progress very slow indeed. Following the N.W. ridge for perhaps 30 yards, a descent was made almost straight down towards Bricolla. The party unroped at 20.00 on the moraine, and the hotel was reached at 21.00 hrs. Given good conditions, these times could be greatly improved on, and the summit reached from Mountet by this arête in 7-8 hrs.

Bernese Oberland.

TRAVERSE OF THE HÖRNLI RIDGE. Point 2866 m. to the new Mittellegi Hut. August 6, 1927. Messrs. S. Uramatsu and S. Matsukata, with Emil Steuri and Samuel Brawand.



Photo, Wehrli.]

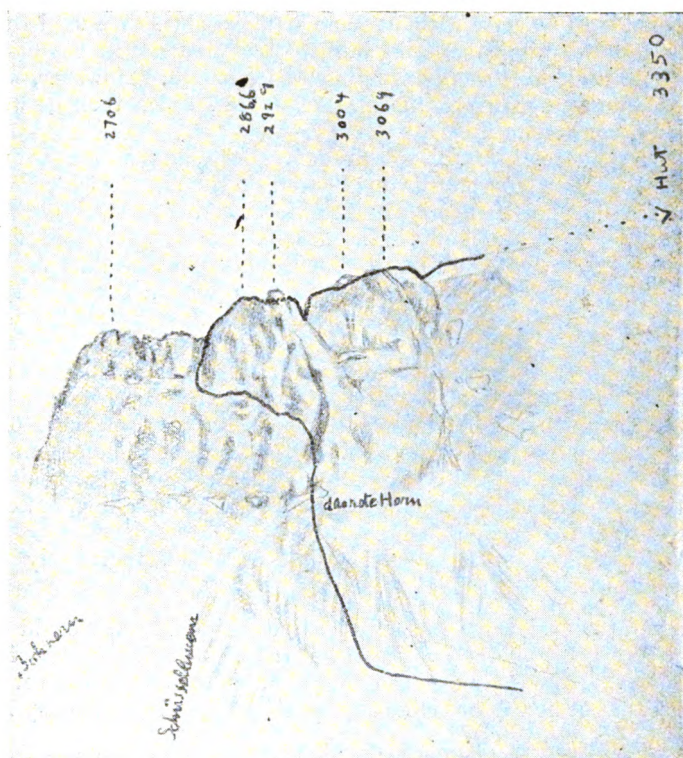
EIGER AND MITTELLEGI ARÊTE.

We left the Hotel Alpiglen at 03.15 and followed the 'Bohner'n' way up to the W. rib of the great avalanche passage—*Schüssellauene*—directly below the Hörnli, where we began to ascend in the direction of a characteristic wide snow patch which marks what is locally called *das rote Hörn*.

We gained the ridge at 07.30 at the saddle. After half an hour's rest we started to traverse the ridge. Point 2866 m. was gained at 08.45. The second Hörnli peak was not climbed over but crept through; *i.e.* after a little excavating work we managed to make an

artificial tunnel of about 7 ft. through the foot of it to the other side. This short cut enabled us to get to the cleft as early as 10.30.

This is the prominent gap on the N.E. ridge of the Eiger which separates the point 2929 m. from the point 3004 m., or, in other words, the West-Hörnli from the East-Hörnli. [This place was not unfamiliar to us, as three of us, with other companions, came up to



HÖRNLI RIDGE WITH 1927 ROUTE.

this point in September, 1926. But the conditions were not quite favourable then and, moreover, we were not fully equipped to force our way. Result was a retreat down to Alpiglen through mist and dusk. A bitter experience, the memory of which has never ceased to haunt us since.] There seem to exist two ways of getting to the W. top of the cleft: The first traverses the S.E. flank and gains the ridge by a long couloir dropping from the ridge to the Kalli glacier. This is very exposed. The other necessitates climbing the smooth face of the cleft directly upwards by means of a crack and then traversing to the S.E. flank over an edge to get to a gully behind it

and follow that gully to the ridge. The N.W. side of the ridge seems impossible neither does the climbing of the whole W. face of the cleft appear possible, as it projects towards the middle.

We chose the second way. The first few metres of the crack were comparatively easy. But then it becomes too narrow to allow either hand or foot to get in, while between the top of the crack and the edge there exists a completely smooth face which is absolutely impossible to traverse without some artificial aids. We used three nails and two pitons. Boring into the rock under these conditions meant considerable sacrifice of time and strength. However, with great effort we managed the first 10 metres, which took between 2 and 3 hours.

Then the second stage of work began. Belaying the rope over the highest nail, the first man swung himself slowly over the edge to the S.E. face until he gained a small platform and then the bottom of the above-mentioned gully. The next 30 metres were climbed by this gully under the most exposed and difficult conditions. At last at 14.00 the first man stood on the top of the cleft, but more than 2 hours had to be spent before the last left this gap behind him, 16.15.

Although we knew that the rest of the ridge was not difficult and we still had plenty of time, we could not rest as the weather was threatening. In fact before finishing the traverse of the Hörnli ridge, we were caught in a storm. For 1 hour we sheltered on the ridge, waiting in vain for it to clear up. The traverse of the remainder of the Mittellegi ridge to the hut was not at all plain sailing, but only because of the storm and lightning.

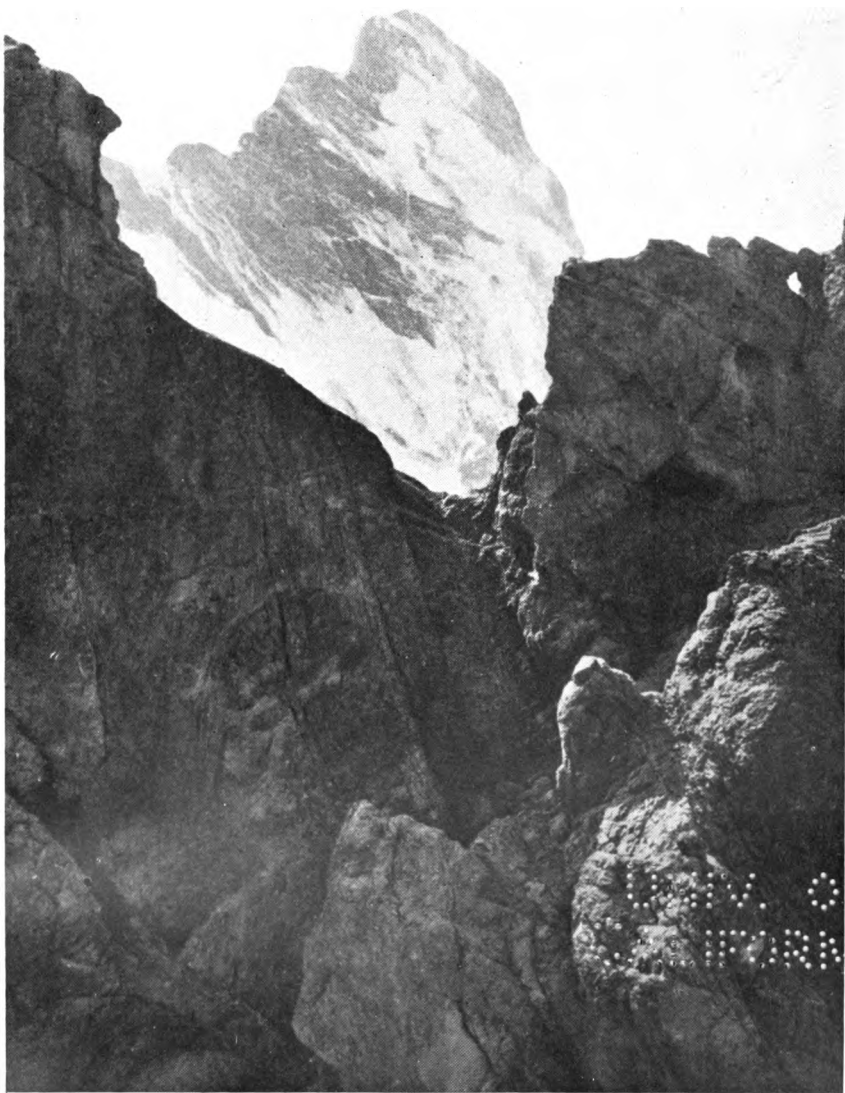
We rushed into the Mittellegi hut at 19.40, thoroughly wet through but with extreme joy.

Some pictures will supplement my description. We could not take any good photographs showing the cleft well, because of its position. Those taken on the spot are able to show how a certain crack runs or how it was climbed, but they can hardly give any idea of the cleft as a whole.

It is better to call in the help of a photograph to explain how we made a short cut, as it is difficult to make the point clear by any description, although it has little importance. The photograph is taken from point 2866 m. in 1926. The gap is the one between the II. peak and III. peak (last of the East-Hörnli). The black spot on the right hand of the gap is the cave through which we made a tunnel without any difficulty. A hole near the skyline of the ridge will serve to explain how the ridge is suffering from weathering, especially at this point.

S. MATSUKATA.

[The *Climbers' Guide*, Bernese Oberland, I, i, pp. 144-9, gives full details of the history of the Hörnli, of which all the points had previously been climbed. This appears to be the *first* complete traverse of the ridge, as well as a new 'combination.'



Phot. S. Matsukata.

EIGER WITH GAP BETWEEN PEAKS II AND III
from Point 2866 m.

Digitized by Google

The credit of the first *upward* traverses of the Hörnli-Mittellegi-Eiger arête thus clearly belongs to the Japanese parties and their guides, 'A.J.' 34, 166-7.—*Editor.*]

Drakensberg, Natal.

An attempt on CATHKIN PEAK (c. 10,500 ft.). July 13, 1927. Messrs. G. F. Travers-Jackson and O. K. Williamson left at 07.45 a camp in the Hlwazeni valley situated about 200 ft. above its level floor. The Hlwazeni valley runs in a direction somewhat W. of N. and separates the main Drakensberg ridge from the subsidiary one, of which the chief summits are the Monk's Cowl and Cathkin Peak. At its highest point (S.) it is close to the junction of these two ridges. We traversed slopes on the true right of the valley, then ascended a glen in an approximately N.E. direction to the depression separating Cathkin Peak and Monk's Cowl, Cathkin Neck reached at about 09.40. We descended the left-hand slopes of Monk's Ravine, approximately in a N.W. direction, for about 300 ft., then traversed to the left, slightly ascending, on the grassy slopes immediately under the rocks of Cathkin Peak.

The slopes from here onwards were frozen hard and were covered by a thin layer of recent snow. Above us loomed the precipitous rocky wall of the S. bastion of Cathkin Peak, separated from the main peak by a well-marked depression. Our slopes brought us to the right-hand side of the deep ravine on the S.E. side of the mountain, which descends from close to the summit. The slopes on the left-hand side of the gully which forms the bed of this ravine are far steeper than those on its right; they are, in fact, quite precipitous. The slopes on the right consist of steep grass separated by low rocky walls which extend horizontally, a formation characteristic of the Drakensberg. Having reached the actual gully, it was found that its direct ascent would consume too much time, owing to rock work interspersed with ice which would be involved; accordingly, the slopes on its right were ascended in zigzag fashion. Two later attempts to ascend directly by the gully were given up for similar reasons. At one point it was necessary to ascend one of the low rocky walls by a chimney some 25 ft. high, affording some delightful ice work. Steep, grassy, and rocky slopes then led to a short level rock ridge. From a ledge some glazed rock slabs had then to be climbed to a good platform about 20 ft. above their base. Descending from this, a sensational though not difficult traverse to the left (looking up) under a rocky bulge brought us to steep rock and grass, and following this the ascent of a short chimney crowned by a chock-stone led us to the foot of the last chimney but one, perhaps 80 ft. high. The lower portion of this (15-20 ft. in height) contained some ice and led us through a hole.

Above this lay a choice of routes, obviously none of them

easy. As it was now 17.00, and only about an hour's daylight remained, although we estimated our height as only about 150 ft. below the summit, it was considered unjustifiable to proceed farther, and we reluctantly started the descent. This was effected by approximately the same route as used in the ascent by the grateful aid of a nearly full moon which shortly rose above the crags on our left. Owing to the exigencies of the steep icy slopes, the rope was not discarded until the Monk's Ravine was again reached. In this we were greeted by a hurricane of wind. After becoming involved in some thorn bushes we finally regained camp at 02.50 on the 14th inst., the expedition having lasted 18 hrs., including halts of approximately $1\frac{1}{2}$ hr. From the time of leaving the Monk's Ravine during the ascent the slopes where they were not snow-covered were hard frozen, and we were subjected for a considerable part of the day to a very cold wind; apart from this the weather was very fine. Many hours of valuable time were, of course, lost in working out the best route.

We both are of the opinion that owing to the continuous care needed for many consecutive hours on the exceedingly steep slopes, especially during the descent, the expedition under the circumstances in which we undertook it must be ranked as a really difficult one. Probably the conditions were exceptionally bad; snow had fallen on the mountain two days previously. It has been suggested that the above record may be desirable, although we were unsuccessful in that we failed to reach the summit. It is certain that the climb afforded a day of magnificent mountaineering experience.

O. K. WILLIAMSON.

ALPINE NOTES.

THE ALPINE CLUB OBITUARY :	Date of Election
Howard, Eliot	1867
Mortimer, Alexander	1867
Michell, Colonel J. W. A.	1882
Spence, W. M.	1891
Fletcher, Colonel P.	1892
Barran, Alfred	1897
Minchinton, Major H. D.	1909
Bicknell, R. P.	1911
Minor, P. S.	1911
Lamb, R.	1917

'BALL'S ALPINE GUIDE,' THE WESTERN ALPS.—The edition (1898) by Mr. Coolidge covers the Maritimes, Graians, Dauphiné, Mt. Blanc group, and Pennines to the Simplon. With maps of each district, 1 : 250,000, and a general map. Price 10s., or 10s. 4d. post free. Obtainable from any bookseller or the Assistant Secretary.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. Part I.—The edition (1907) by Rev. A. V. Valentine-Richards covers Switzerland and N. of the Rhone and the Rhine. With nine maps, 1 : 250,000, and a general map. Price 5s., or 5s. 4d. post free, or unbound 2s. 6d., or 2s. 10d. post free. Obtainable as above.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. Part II.—The edition (1911) by Rev. G. Broke covers the Alpine regions S. and E. of the Rhone and Rhine as far as the Adige, *i.e.* the Lepontine, Grisons, Rhaetian (including Bernina), Ortler and Adamello groups. With nine maps, 1 : 250,000, and a general map. Price 5s., or 5s. 4d. post free, or unbound 2s. 6d., or 2s. 10d. post free. Obtainable as above.

'GUIDES DES ALPES VALAISANNES.'—

Vol. I. Col Ferret to Col de Collon, by M. Kurz, 10s.

Vol. II. Col de Collon to Col Théodule, by Dr. Dübi, 9s.

Vol. III. Col Théodule to Weisstor, by Dr. Dübi, 8s.

Vol. IV. Col Simplon to Furka, by M. Kurz, 8s.

At Stanford's, Long Acre, W.C. 2.

'GUIDE VALLOT.' Vol. I. LES AIGUILLES DE CHAMONIX.—Par J. de Lépiney, E. de Gigord and Dr. A. Migot, with 39 route-marked illustrations and 2 outline maps. Paris : Fischbacher, 33 rue de Seine. 1925. 20 fr.

This admirable Climbers' Guide is a complete monograph of the Aiguilles and may be said to be a much enlarged and more elaborate 'Kurz' or 'Mont Blanc Führer.'

'GUIDE VALLOT.' Vol. II.—L'Aiguille Verte, par Henry de Ségogne, E. de Gigord, J. de Lépiney, J. A. Morin, with 34 route-marked illustrations and 5 maps. Paris : Fischbacher, 33 rue de Seine. 1926. 25 fr.

A CLIMBER'S GUIDE TO THE ROCKY MOUNTAINS OF CANADA.—By Howard Palmer and J. Monroe Thorington, published for the American A.C. by the Knickerbocker Press, N.Y., 1921. This very useful summary, with several maps, of what has been done in the Rockies to 1921, can be obtained from the Assistant Secretary, 23 Savile Row, price 7s. 6d.

THE 'CLUBFÜHRER DURCH DIE BÜNDNERALPEN.'—Vol. IV., covering the Bregaglia and the Disgrazia group, by H. Rütter, with the assistance of Christian Klucker, can be obtained from Sauerländer and Co., Aarau, Switzerland.

LES ALPES DE SAVOIE.—Vol. VI., Part I., by Commandant Emile Gaillard, M.C. (Dardel, Chambéry, 27 fr. 50 post free), covering the

groups Trélatête, Bionnassay-Goùter, M. Blanc, Brouillard-Pétéret, and Maudit-Tour Ronde, with skeleton maps of each group and several marked sketches, has just appeared. It follows generally the plan of the Kurz guide, and includes the full information of all recent climbs.

Part II., covering the groups of the Chamonix Aiguilles and the groups of the Grandes Jorasses and the Talèfre, will appear very shortly and can be subscribed for at 22 fr. 50 post free.

The full series is as follows :

Vol. I. Le Massif entre l'Arc et l'Isère (new edition).

Part I. N. of Col de la Vanoise, 27 fr. 50 post free.

Part II. S. of Col de la Vanoise, 22 fr. 50 post free.

Vol. II. La frontière entre la Seigne et le Thabor, 22 fr. 50 post free.

Vol. III. Les Massifs entre la Savoie et le Dauphiné, 24 fr. 50 post free.

Vol. IV. Les Massifs de Beaufortin et Les Bauges, 27 fr. 50 post free.

Vol. V. Les Massifs entre le Lac d'Annecy et le Léman (to appear in 1927).

Vol. VI. Le Massif du M. Blanc.

Parts I. & II. as above.

The volume of Commandant Gaillard's 'Les Alpes du Dauphiné,' Part II., covering the Massifs of the Meije and Ecrins, is announced for 1927 and can be subscribed for later.

These guides have full sets of skeleton maps and many route-marked sketches, so that the French Alps are now very well off for guidebooks.

Commandant Gaillard will issue early in 1927 a new coloured map of the M. Blanc group, scale 1:50,000, with all the most recent nomenclature. See 'Reviews.'

THE JOURNAL OF DE SAUSSURE covering his sojourn at Chamonix in July and August 1787, with an introduction and many notes on little-known details by Commandant Gaillard and Mr. Henry F. Montagnier, and heliogravures, was published recently, with the authorization of the family. It shows his preoccupations and hopes and finally his unmixed joy at the success.

Subscriptions can be sent direct to Commandant Gaillard, M.C., Barberaz, Savoie, France. Edition de Luxe, 4to, 150 fr., ordinary 4to, 60 fr., foreign postage, 5 fr.

MONT BLANC GROUP.—A query to the effect of 'Where are les jeunes Britanniques ?' was made in the May number of the JOURNAL.

The performances of several young British parties during the past and generally so universally bad summer speak for themselves. They recall the classical days of 1881-1912.

We understand that the AIGUILLE DU ROC, Mummery's 'Crag on the Grépon,' was climbed for the first time, last August, by an American lady led by Armand Charlet. The expedition was repeated, a few days later, by a French G.H.M. party together with two English ladies. In each case the ascent was from the Mer de Glace and is reported to have been very difficult.

The N.W. slope of the COL MAUDIT has also been ascended by a French party. The 'pass' does not yet appear to have been accomplished *en col*.

The monument to PIERRE GASPARD, conqueror of the Meije, was duly inaugurated at St. Christophe-en-Oisans on July 14 last. It consists of a handsome granite slab, shaped like the outline of the Meije, and a bronze model of the ice-axe carried by Gaspard on the ascent. The inscription reads as follows :—

PIERRE GASPARD, 1834-1915.

'A la Mémoire du Vainqueur de la Meije, 16 août 1877, le Club Alpin Français (Section de l'Isère) avec le concours de la Société des Touristes du Dauphiné, d'alpinistes français et de membres de l'Alpine Club.'

1927. R.I.P.

The Jubilee of the first ascent of LA MEIJE was celebrated subsequently by a banquet at La Bérarde. MM. Berge, Président d'Honneur du C.A.F., Auscher, Gatine, Lory, Vallot, Blanchard, Legat and Gustave Béranger were among the hundred or more distinguished members, ladies and gentlemen, of the C.A.F. who attended. Dévouassoud, son of Pierre Gaspard, was among the guests. The solitary representative of the A.C. at La Bérarde was made a guest of honour and takes this occasion to renew his warm thanks to his kind hosts for their, almost too great, hospitality.

Later again in the day, some 50 members and guides slept in and inaugurated the new Écrins or VALLON CLUB HUT. Nearly 40 others slept in the old Carrelet (!), while some 30 spent the night in the PILATTE or Gioberney Refuge. On July 15, with perfect weather, seven parties traversed the Pointe des Écrins, while the Pic Coolidge had, it is stated, some 100 persons on or about it. The W. peak of the Ailefroide was also climbed *via* the Brèche des Frères Chamois. The 'times' appear, not unnaturally, to have been exceedingly slow !

A new Chalet Hôtel has been opened at LA CHAPELLE-EN-VALGAUDEMAR. It is well spoken of and La Chapelle is now accessible (summer of 1927) by motor charabanc, three times a week, from Grenoble, in $3\frac{1}{2}$ hours or less.

BREITHORN GEMELLI.—With reference to a note on these points in 'A.J.' 39, 153, we are courteously informed by Signor Ferreri, Editor of the *Rivista Mensile*, that the name occurs in the 'Bolletino' of 1886, as also in Signori Bobba's and Vaccarone's *Guida delle Alpi Occidentali*, published in 1896. I have also lately received the latest revision of the Siegfried map sheet, No. 535, on which the name *Breithornzwillinge* is given to the point 4148 m. There is consequently nothing 'new' in the name and my apologies are due to the Editor of 'R.M.' and to Signor E. Barisone, the writer of the article in question.—E. L. S.

Nothing appears to be settled as to the site for the projected Club Hut for MONT POURRI. Les Brévières and Peisey are still the nearest (decent !) starting-points for this splendid peak (8–10 hrs.).

A large S.A.C. hut, called PIERRE BORDIER, has been constructed close to the Klein Bighorn at a height of 2980 m. on the right bank of the Ried glacier. The hut, which is about 6 hours distant from St. Niklaus, should prove very useful for the Balfrinhorn, Ulrichshorn and all the Nadelgrat peaks. This and the Topalihütte will, it is to be hoped, enormously increase the popularity of St. Niklaus, where superior accommodation at half the prices prevalent further south is available, but where the distances to the higher peaks have, hitherto, proved almost prohibitive.

The death is announced, at the age of 80, of Father ALJAŽ, the mountaineer-musician priest, who was one of the fathers of Alpine climbing in Slovenia and the Julian Alps.

With reference to the N. face of the TRIGLAV, we are given particulars, through the courtesy of Mrs. Copeland, of an attempt, this summer, to force a new route up this face further to the E. than the original¹ 'Austrian' route. A party consisting of M. Držaj and Madame Pibernik of Špik fame ('A.J.' 39, 138–41) had reached a point about one-third of the way up the wall, when a piton gave way and M. Držaj, the leader, fell some 45 m., the rope then fortunately hitching without a break. Madame Pibernik, although much injured by the shock, contrived to lower the partly unconscious M. Držaj from ledge to ledge for some 400 m.—an extraordinary feat for a slightly built lady of twenty-two. The accident took place at 09.30 and it was not till 18.00 that the much enduring party

¹ See illustration, *A.J.* 39, 136–7.

reached the big ledge at the foot of the face whence the N. routes start. Here they were rescued by a search party of whom Mrs. Copeland was one. Madame Pibernik's great performance undoubtedly saved both their lives and the accident is a further proof of the evils of attempting to scale otherwise impossible rocks by the pernicious modern habit of driving in pitons. 'M. Držaj is, miraculously, very little the worse for his fall.'

A party of three Slovene mountaineers has succeeded in forcing the 'diagonal' climb *across* the N. face of the TRIGLAV, which has been responsible for several previous fatal accidents.

According to *Der Berg*, 6, 1927, p. 120, another variation, called 'Bayerländer Weg,' has been forced up the lower part of the TRIGLAV's N. face, September 6, 1926, by Herren G. Kuglstatter and H. Unger. The great gully was reached direct from the foot by a climb of 200 m. which took 8-10 hours. The route was composed of rotten and dangerous rocks and many pitons were used. The ascent was completed by the old 'Austrian' and 'Kugy' routes, but no 'times' are given for the ascent of the last 1450 m.

'R.M.,' xlv, pp. 210-13, gives details of an Italian ascent of the N. face of the TRIGLAV. The mountain is called 'Il Tricorno.'

A well-informed evening paper, the *Evening Standard*, of September 8, announces that a Georgian party has made the ascent of ELBRUZ. The 'only previous ascent' is stated to have been in 1891!

Field-Marshal LORD METHUEN, G.C.B., etc. (Ordinary member, 1870-85, 1905-9), has been elected an Honorary Member of the Alpine Club. Lord Methuen made several important ascents with Christian Almer as far back as 1869, while in 1875 he took part in one of the earlier attempts on La Meije from the Rocher de l'Aigle and was in the second crossing of the Domjoch.

Mr. GEOFFREY WINTHROP YOUNG, accompanied by Mr. Claude Elliott, with Franz Lochmatter and Hans Brantschen, made the ascent of the Dufourspitze on July 24 in 9½ hours from the Bétamps hut, the descent to the Riffelalp taking some 8½ hours. Mr. Young also made the traverse of the Furggengrat and Theodulhörner as well as of the Riffelhorn. He appears to have stood the exertion—which even for him must have been excessively painful—remarkably well. He states that 'the expeditions were done largely to encourage persons like myself.'

A party of members of the C.A.F. and S.A.C., under the leadership of M. Joanides and Madame Boissonnas, left Marseilles on September 3

to ascend MOUNT OLYMPUS, visit the Valley of Tempe and the highly interesting Kalabaka monasteries among the 'Meteors' (the scene of a fight between French cavalry and Greek 'royalist' troops in 1917). The expedition, so writes Mr. Freshfield, is intended to inspire enthusiasm for mountaineering among young Greeks. The Hellenic Government is giving it every support. The expedition was to be accompanied by a cinema. It is regretted that owing to the necessary short notice neither Mr. Freshfield himself nor any members of the Alpine Club were able to join the party, which, we trust, will have been able to visit, the 'male' portion, at any rate, Mt. Athos and its wonderful monasteries. M. Bregeault, the well-known mountaineer, was to have accompanied the party. We hope that the expedition will have realized all its aims. LATER: We learn that the expedition was most successful.

We are glad to hear that Herr W. WELZENBACH, the President of the Akademischer Alpenverein, Munich, a mountaineer who has given proofs of his capacity and skill not only on his own mountains but also in great expeditions in the Pennines and Mont Blanc, has practically recovered from his recent illness. He, however, still suffers from a stiff elbow-joint, which will handicap his climbing. It is hoped that this may yield to an operation.—J. P. F.

Herr K. M. Oesterle is President of the AKADEMISCHER ALPENKLUB, Berne, for this summer, while Herr W. H. Amstutz is the *Hüttenchef*.—J. P. F.

Signor Commendatore BOBBA kindly informs us that Aimé Maquignaz will open next summer a new mountain-inn, which will probably serve as the main starting-point for the ascent of the Matterhorn from Breuil. The inn will contain 20 rooms and 40 beds. It is situated on the LE RIOUDÉ, 2804 m., promontory, on the path from Breuil to the Col du Lion. From the Breuil or Furggenjoch it is easily reached in 1 hour by skirting the S. flank of the Matterhorn (*ca.* 2 hours from the Hörnli Inn or hut). In any case, the inn will much relieve the pressure on the small Luigi Amedeo hut, where as many as 30 persons have been packed simultaneously, while in bad weather a safe return to Breuil, or even Zermatt, is assured.

Mr. D. F. Dangan is good enough to point out that the 'unnamed' col between the A. des Petites Jorasses and the A. de Leschaux referred to in 'A.J.' 39, 143, is in reality called COL DES PETITES JORASSES (3526 m., Vallot). See *La Montagne*, 1925, p. 211.

A RASH ASCENT OF THE AIGUILLE DE GRÉPON.—A party consisting of MM. André Roch and J. Belayeff [the same, who, with Armand Charlet, made the ascents of the Dent du Requin and Aiguille du

Plan in April, 1926], with Armand Charlet and Camille Dévouassoud, accomplished this climb, *via* 'C.P.' and the 'Cheminée Lochmatter,' on April 17, 1927. . . . 'Leaving Plan de l'Aiguille at 10.15 (late departure on account of uncertain weather earlier), we attained the Col des Nantillons, on ski, at 13.30. Excellent conditions. Thence, easily to "C.P." at 14.00. Since midday we had been nearly blinded by a violent wind, but the weather was absolutely safe. From "C.P." we reached the summit after 4 hrs. of the most intense and continuous exertion. The conditions were dreadful, rocks buried in snow or ice, progress was only foot by foot, cutting steps with the axe and finally—in the "Cheminée Lochmatter"—with a knife. Every crack and crevice choked with snow and ice; on no less than four occasions, from "C.P." upwards, were we obliged to stand on one another's shoulders. On the top, attained at 18.00, the gusts of wind were terrific. We made a very quick descent (by the "Cheminée Knubel") to the Col, Dévouassoud a masterly anchor as "last man." Picking up our ski, but not putting them on, we reached the foot of the Charmoz-Grépon couloir at nightfall, and, although very fatigued, descended as rapidly as possible to the Plan de l'Aiguille, arriving at 20.45. It was one of the hardest ascents that I have ever made, and if our party had not been a very strong one, it would certainly have been impossible to succeed under such shocking conditions. . . . I need not say how happy I am that we have succeeded.' (Letter from Armand Charlet, dated Argentière, April 19.)

We have received the following notes on an ascent of the AIGUILLE DE GRÉPON on August 3, 1927 :—'The Knubel chimney was led by Mr. G. S. Bower, the tactics being similar to those employed in the ascent of the Flake Crack on Scawfell central buttress, *i.e.* loops of rope threaded through the chockstone through which the rope is passed. The leader then brings his second up to the chockstone and ties him on to the said chockstone before leading the climb. The leader is thus well belayed. Knubel informs me that he led this chimney direct from the bottom without bringing his second up to the chockstone. This seemed to us, however, both unnecessary and unjustifiable when the chockstone offers so good a belay, and, while there is no actual stance, the second can wedge himself in very securely beneath the chockstone. Mr. Bower considers this climb harder than the Flake Crack on Scawfell. No ice-axe was used.'

F. E. SMYTHE.

Mont Blanc was climbed from the BRENVIA glacier on July 26 by no less than three parties: *i.e.* a Swiss party consisting of Herren von Schumacher and Amstutz, a French party composed of M. Chevalier and two other members of the G.H.M., and a German party made up of Herr Allwein and a friend of the A.A.V., Munich. The Swiss and leading party state that the conditions were excellent,

and that there was little or no step-cutting required except just towards the top; the times are given as:—

Rifugio Torino	dep. 01.15
Foot of Brenva face	03.40–03.50
End of ice ridge	04.50–05.00
Last rocks	06.10
Col de la Brenva	07.35–07.40
Mont Blanc	08.40–08.54

These times are, to use the word of the greatest authority on the route, 'marvellous.' We are informed that the party (or parties?) 'had the wisdom to cut steps on the day before, so that they could make good progress in the early hours down the couloir of the Col de la Tour Ronde.' If such was the case, all the more credit to the parties for their mountaineering instinct.

The Swiss party descended *via* Mt. Maudit and Mt. Blanc du Tacul, attaining Chamonix at 19.00 hrs., while the French and Germans descended 'another way.' Herr Amstutz rightly thinks 'that von Schumacher and I hold the best times for the E. face of Monte Rosa (8½ hrs.), Pétéret ridge and Brenva. This is for us a great satisfaction and shows what one can do with Eckenstein crampons.'²

These 'international' parties were, it is understood, followed, quite independently, on the next day, by another, *i.e.* a British 'rope,' composed of Messrs. Smythe, Ward and Brown.

It is reported that Herren Obersteiner and Schneider of Graz made the ascent of Mont Blanc by the PÉTÉRET arête, starting on July 31 from the *Gamba* Club hut. The party bivouacked before reaching the Aiguille Blanche and the summit of Mont Blanc was attained very late on August 1.³

Herr von Kehl with Fritz Amatter and Fritz Suter of Grindelwald and a Courmayeur porter repeated the same route from the same hut on August 4. Owing to Amatter's rightly considering it essential to cross the Fresnay glacier by daylight, it was arranged to bivouac *en route*. The party, accordingly, left the Gamba at 03.30 on August 3. The 'Col⁴ des Dames Anglaises,' between l'Isolée and the Aiguille Blanche was attained in 3 hrs., the A. Blanche was left behind by 13.30 and the Col de Pétéret reached at 15.30, where the party

² Any reader requiring an *unbiased* view on the said (or any) crampons should apply to that great mountaineer Pierre Blanc of Bonneval-sur-Arc.—*Editor*.

³ This appears to be the first attainment of the gap between L'Isolée and the A. Blanche from the Fresnay side.

⁴ This col was attained from the Brenva side, August 28, 1913, by Count Bonacossa, Signor Prochownick and Dr. Preuss, when making the first ascent of the A. Blanche by the S.E. arête, *A.J.* 28, 81–2.

dug a bivouac in the snow. Leaving the bivouac at 04.00 on the following morning, they arrived on the summit of Mont Blanc at 11.50 and Courmayeur *via* the Dôme route at 21.20. Amatter reports that he met with no serious difficulties. It is stated that the Courmayeur porter stipulated for and received a 2000 *lire* fee.

I. DE BRUÏN.

The best way to reach the BERTHOL CLUB HUT from Ferpèche is to follow the ordinary Col d'Hérens route from Bricolla and to contour round the upper snows of the Ferpèche and Mont Miné glaciers. The two routes given in *Guide des Alpes Valaisannes*, ii., are very round-about.

H. R. C. CARR.

Between August 6 and August 20, members of the Climbers' Club, APPALACHIAN MOUNTAIN CLUB and of the Oxford Women's Mountaineering Club, met at Arolla, Bricolla and Ferpèche. The gathering numbered between 40 and 50 all told. The weather, except towards the end of the fortnight, was fairly good and most of the local peaks were climbed by various routes. On the eve of the meet the Dent Blanche was traversed by the N.E. arête by a strong American party led by Franz Biner. Some excitement was caused at Ferpèche owing to a guideless party becoming benighted on Mont Miné in a severe thunderstorm, but the incident had no serious results and provided a salutary lesson.

H. R. C. CARR.

If we are to credit Press reports, MONT BLANC DE COURMAYEUR has been rechristened *Monte Benito Mussolini*. We recollect that a similar change of nomenclature, proposed for the Adamello-Presanella peaks in 1919, was happily abandoned.

The fate of the SILS LAKE project, we are informed, is still undecided. A vigorous campaign continues to be carried on by the S.A.C., Sektion 'Bernina,' and other societies against the threatened desecration. It is stated that one very small sub-section of the S.A.C. has gone over to the enemy. It is to be hoped that they will soon see the error of their ways. It is expected that the assembly of the delegates of the S.A.C. will be practically unanimous against the project, and their vote will largely influence the action of the competent authorities.

We regret to learn that Mr. E. G. Oliver was seriously injured in the disastrous accident on the CHAMONIX-MONTENVERS railway last August. We wish him a speedy recovery.

The Alpine Club is indebted to Mr. H. W. Malkin, C.B., C.M.G., for the gift of several original letters from the Rev. THOMAS BRAND,

for some time tutor to Sir H. J. L. Graham (father of Sir Ronald Graham, H.B.M.'s Ambassador to the Quirinal), describing a tour in the Alps in 1780.

EARTH TREMORS AT PONTRESINA.—On August 14, 1927, at about 02.00, there was a very considerable earth tremor, followed during the next hour by three or four more very much less severe, and, on the morning of August 18, when we were ascending Piz Zupô, we found that a big crack in the upper névé of the Morteratsch glacier had been very much affected by this earth tremor. The crack is situated immediately below where the ordinary route to Piz Bernina turns off nearly due W., while the route to Piz Zupô goes straight on due S. The névé round the crack had completely collapsed and left a tumbled ruin of névé about 30 ft. wide. It was necessary to descend into the crack and cross by this tumbled névé to get across. It would be interesting to know if other persons have experienced the effect of earth tremors on séracs.

R. C. ASHBY.

We are very glad to learn that the S.A.C. has acquired for its library all that portion of the late Mr. COOLIDGE's collection dealing with the Alps and their history. 'The S.A.C. Library, consequently, finds itself richer by nearly 5000 volumes, many of great value.' From *Die Alpen*, October 1927.

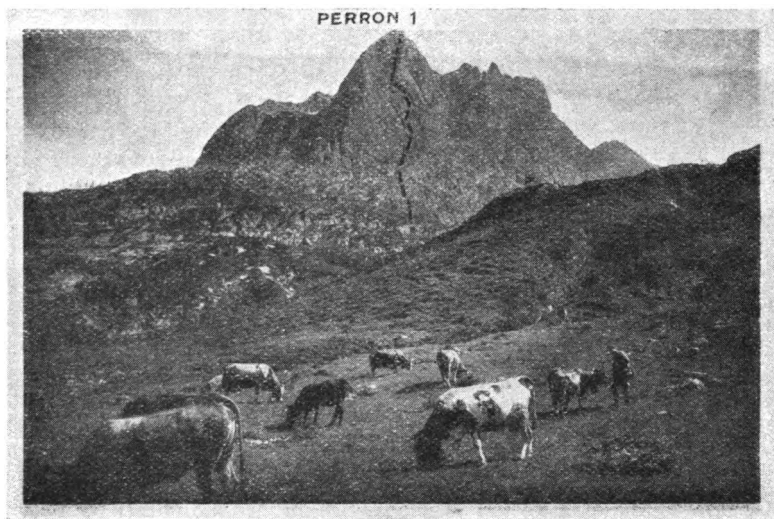
A new Club hut—**CABANE EDOUARD DUFOUR**—has been constructed by the S.A.C. on the left bank of the Glacier de la Neuvaz. It is situated on *Les Essettes*, at a height of 2731 m., some 5 hrs. distant from the new hotel at La Fouly in the Swiss Val Ferret.

S.A.C. Club huts are to be erected on the CAVARDIRAS Lücke, 2705 m., above Disentis; Piz LISCHANNA near Vulpera in the Lower Engadine (completed); GLATTALP in the Bisisthal (completed); TURTSMANNHÜTTE, 2500 m. on the Pipialp; the BRITANNIA Club hut is to be much enlarged.

We regret to learn that the well-known guide HANS BURGNER (1852–1927), of Grindelwald, has died. He will be remembered as the genial guardian of the Glectstein Club hut.

LE PERRON DE VALLORCINE, No. I, or Aiguille du Vent, 2573 m., was climbed by its W. face, September 21, 1927, by Monsieur E. R. Blanchet with Caspar Mooser. The ascent of this high and vertical face had previously been reputed as impossible, and from the Chalets d'Emosson has all the appearance of a Dru. The entire scramble was executed in quite indispensable *Kletterschuhen*. Rocks perfect, with minute and distant but reliable holds. In general, steer towards two rocks shaped like donkey's ears. These appear to be

at the summit but are in reality some 60 ft. below. A 60 ft. rope suffices. Many overhangs and absolutely smooth bits : ' I was more



SHOWING M. BLANCHET'S ROUTE.

pleased with this formidable scramble than with either of my ascents of the Lyskamm or Zumsteinspitze.'

E. R. BLANCHET.

According to the Siegfried map there are *two* Aiguilles du Vent, the other is given the height of 2581 m. The GRAND PERRON is measured as 2677 m. ; this latter has also been climbed by its steep N.W. face by M. Blanchet.

LA REBARMA, 2489 m., was climbed by its W. and unexplored arête, while the N. face of the Clocher de la Rebarma (nameless and unmeasured on the S. map) was descended this October by M. Blanchet.

M. Blanchet also reports a sensational descent, by his party, of the RIFFELHORN. In accordance with an ancient (and excellent) custom, it would be ' indiscreet ' to publish any details.

Miss Sheila Macdonald, daughter of Mr. Claude A. Macdonald, together with Mr. W. C. West and Major O. Lennox-Browne, made the ascent of KILIMANJARO (19,710 ft.) on July 31, 1927.

Mr. C. W. JARDINE, aged sixteen, son of Mr. J. W. Jardine, made with his father on August 27, 29, and September 1, 1927, the following expeditions : Brunni Pass, Piz Corvatsch, Pizzi Palù.

In commemoration of the Prime Minister's visit to the Dominions a mountain of some 11,000 ft. in the neighbourhood of the Yellowhead Pass has been christened Mount STANLEY BALDWIN.

Through the courtesy of Colonel von Steiger, head of the Topographical Bureau, Berne, and H.E. the Swiss Minister, I have received the advance *new* sheets (1927) of the SIEGFRIED MAP, 520 'Maloja' and 523 'Castasegna,' as also a 'tentative' copy of 520 with the grassy part shaded in *green*. It would be presumptuous as well as indiscreet to 'review' these splendid sheets. They are quite indispensable for mountaineers visiting the Bregaglia and Masino district.

E. L. S.

A new 'shelter hut' has been placed by the C.A.I. some 30 m. below the summit of the TÊTE de ROËSES on the Valpellina ridge. It is accessible in 4 hrs. from Prarayé. A description of the contents, etc., of these huts is given in the *Annuario* del C.A.A.I., 1924-6, pp. 35-41.

We regret to learn that Signor PINO PRATI has been killed, together with a companion, on the Guglia di Brenta. Signor Prati was the leader on some of the most difficult routes accomplished in the Brenta Group in recent years. Although aged only twenty-four, he was the author of the excellent C.A.I. Climbers' Guide, *Dolomiti di Brenta* ('A.J.' 38, 352-3).

BRÈCHE SANS NOM.—In a footnote ('A.J.' 39, 133) it is stated that 'this appears to be the third time that the Brèche (3725 m.; *Vallot*) has been attained,' the occasion referred to being the traverse of the Aiguille sans Nom-Aiguille Verte of September 21, 1926. Sir George Morse kindly points out that the footnote should read 'this appears to be the *fourth* time,' the said Brèche having been attained for the first time by himself with Ulrich and Hans Almer during an attempt on the Pic sans Nom on July 30, 1889, as stated by Mr. Wicks ('A.J.' 15, 335, 337). On this occasion the *descent* of the long and steep couloir, all good snow, took but little over an hour.

JUNGFRAUJOCH.—With reference to Mr. Oliver's paper, 'A.J.' 39, 49-51, Mr. Claude Macdonald writes: 'In that excellent paper it is stated that after the 1873 crossing of the Jungfrauoch, Andreas Fischer crossed it in 1894 with difficulty and was of opinion that it had not been crossed "for several years." I crossed it in August 1889 with Christian Jossi and Josef Taugwalder (then a boy) as porter. The Grindelwald guides declared the pass to be then impossible owing to enormous crevasses on the left, N.E., side and a corniche on the right, S.W., side. Seiler of the Wengern Alp told

me that he could not remember when it had been crossed last. We mounted to the plateau between the two icefalls and took the right side, as the crevasses to the left appeared impossible. We reached this side of the summit ridge in $5\frac{1}{2}$ hrs., finding a huge ice wall all along the top. After spending 1 hr. trying to find a way round, we decided to try and hack our way through the wall at its W. extremity, where it appeared least formidable. After 1 hr. of hard chopping, we contrived to creep through a hole in the ice wall on to the summit on the other side and so descended to Concordia and the Eggishorn. I remember in those far-off days, the Scheidegg hailed our appearance on the summit with much firing off of cannon !'

The ancient Refuge XAVIER BLANC, above Le Clot-en-Valgaudemar, has been transformed into a modern Chalet Hôtel. (Communication from M. Maurice Paillon.)

A bronze tablet was unveiled on September 11, at Valtournanche, to the memory of DANIEL MAQUIGNAZ (1856-1910). Signor Comendatore Bobba represented the Alpine Club. The handsome tablet, the erecting of which is largely due to Captain J. P. Farrar, is inscribed as follows :

DANIEL MAQUIGNAZ,
GRAND MAÎTRE DE L'ALPINISME.
HOMMAGE.

WE learn with deep regret of the sudden death, on November 6, of Dr. D. G. HOGARTH, C.M.G., President of the R.G.S., distinguished alike as a great scholar, archæologist, and man of action.

HIMALAYAN NOTES.

THE MOUNTAIN CLUB OF INDIA came into existence at Calcutta on September 23, 1927. Brig.-General the Hon. C. G. Bruce, C.B., M.V.O., has been elected President and Mr. W. Allsup, Gun and Shell Factory, Cossipore, Calcutta, is Secretary. Members are being vigorously recruited and rules framed. We wish this, the youngest, possibly some day the most important, of all the Alpine Club's numerous and prosperous offspring, every conceivable success and fortune.

It is stated in the Press that an ITALIAN EXPEDITION to the Himalayas, under the auspices of the Milan Section of the C.A.I., is in contemplation. The British and Indian Governments having given their consent, another attempt, it is said, will be made on K². We wish the Expedition, should it materialize, every success, and can assure its members that they will not find themselves held up or arrested—on British territory—by irregulars or frontier guards.

NEW ZEALAND NOTES.

MR. MALCOLM ROSS kindly informs us that besides the expeditions of Messrs. Porter and Kurz, described in the present number, the following important climbs were accomplished during the last summer in the Southern Alps :—

MOUNT DE LA BÈCHE (10,058 ft.); December 30, 1926, Messrs. Syme, Mace and Allan, *via* Rudolph glacier to Graham's Saddle, S.W. face, S.E. arête.

MOUNT ELIE DE BEAUMONT; January 5, 1927. Messrs. Syme, Mace and Allan, *via* E. face and S.E. arête.

MALTE BRUN; January 6, 1927. Messrs. Syme and Mace, *via* Malte Brun glacier and W. arête.

MOUNTS GREEN AND WALTER (9507 ft.); January 14, 1927. Messrs. Syme, Mace and Allan, *via* E. arête to divide, N.E. arête to Mount Green, by S.W. arête to Mount Walter.

HAMILTON (9915 ft.); January 21, 1927. Professor and Mrs. Algie with C. Williams, *via* Darwin glacier to head of Bonny glacier, up 'main' arête to summit.

MOUNT SEALEY (8651 ft.) was climbed many times, while the Copeland Pass was ascended thirteen times, Graham's Saddle four times, and Glacier Dome seven times during the season.

The Hermitage has been well patronized and several new hostels will be opened for the next season.

ACCIDENTS IN 1927.

ONCE again the list of accidents makes sad reading. The Alpine Club has lost a Vice-President, a mountaineer of great experience and distinction as also one of its most invaluable 'Himalayan' members, but we may consider ourselves fortunate to have escaped comparatively lightly. The greater number of accidents has occurred, as usual, in the Eastern Alps. The vast majority were, we regret to say, easily avoidable. The numbers of guideless climbers—we have heard of no fatal accidents to guided parties—have increased beyond

all reckoning. We can also add that the number of capable members of these guideless parties is, probably, higher now than it ever has been. But it still remains a fact that the percentage of competent to incompetent parties is far too low. There are reasons for this disastrous state of affairs. Before the war beginners were wont to acquire their mountaineering experience under competent professionals; now, with increased guides' tariffs and decreased incomes, most beginners prefer to learn their business with amateur leaders often nearly as inexperienced and sometimes more reckless than themselves. Quite casually they start their career with the most difficult ascents—ascents which thirty years ago the aspiring mountaineer would never have dreamt of undertaking before his third or fourth season. We ourselves beheld such a party of four gaily setting forth for a difficult ice and rock mountain with only one competent member, the others freely confessing their lack of knowledge of icemanship or ropecraft. Caught in bad weather on an ice slope, after many hours of ascent, but still thousands of feet below their summit, they were able—providentially—to return in safety. To such parties the use of CRAMPONS is a snare and a delusion. They have read foolish tales by enthusiastic mountaineers declaring that experts can mount or descend ice slopes of 70° without step-cutting, even without the support of the axe.¹ It is to be noted that these 'experts' never give the *height* of the ice slope of 70° , which, axeless, they propose to ascend or descend on their crampons. You can be very bold if the probable fall will not exceed 8–10 ft. ! Such flagrant nonsense encourages the beginner to think that he can move safely, without serious previous practice, on slopes of 45° . He finds that he cannot, and 'another Alpine disaster' is too often reported. Such an one occurred last August low down on the Z'mutt ridge of the Matterhorn, the victim being armed only with an umbrella and—crampons.

Another fruitful source of accidents is the modern craze among amateurs for climbing in bad weather. This evil is becoming ever increasingly prevalent, and too many persons who have successfully climbed Welsh, Lakes, or 'Saxon Switzerland' boulders in rain, imagine that serious expeditions may be attempted with similar impunity in the High Alps.

Of four accidents that occurred in the Valais within the space of 10 days, three were caused solely by *starting* and continuing to climb in absolutely hopeless weather conditions.

¹ See *Alpinisme*, No. 7, pp. 211–33, translated from D. & C.E.A.V. *Zeitschrift*, 1925, pp. 204–24, with preposterous illustrations.

THE ACCIDENT ON THE SOUTHERN AIGUILLE D'ARVES.

ON July 31, at 3 A.M., Raymond Bicknell, his son Peter, A. F. Procter, and Sir J. W. L. Napier left Valloire to traverse the Aiguille Méridionale d'Arves to La Grave: it was proposed to ascend by the N.E. face direct from the head of the Glacier de Gros Jean to the Brèche in the S.E. arête, and to descend by the ordinary route.

'By 10 A.M. we had reached the head of this glacier, where we were able for the first time to decide on our exact route. Our objective, the Brèche,¹ was at the head of a snow and ice couloir, some 1000 ft. high, flanked by broken faces of rock. It was decided to ascend by these rocks, keeping as far as possible close to the couloir.

'For 3 hours we made slow but steady progress, though the rocks from the start proved to be loose and rotten. By 1 P.M. we had reached a point where the rocks became more difficult, being, actually at the sides of the couloir, quite impracticable. At this point the couloir contracted, and, for about 50 ft., was distinctly steeper. The best route appeared to be straight up the couloir until over this step, and then to take once more to the rocks on the side.

'With this in view we cut steps across to an island of rock which divided the couloir, and as Bicknell would have to lead nearly 80 ft. from this island before reaching a secure enough position from which to bring the second man on, our second 80 ft. rope was attached between him and Napier.

'Bicknell then traversed the gentle ice slope to the true right bank of the couloir and proceeded up the steeper ice, cutting steps with his right hand and holding the rocks on his left with his other hand. During this manœuvre the position of the three of us was as follows: Napier, second on the rope, was at the top of the island and had a small belay for the rope, but was otherwise in a poor position; Procter, third, 10 ft. below Napier, was on the right of the island, and though in a physically uncomfortable position was well placed to hold a pull from the left; Peter, at the foot of the island, a few feet below Procter, was in a good position where he was able to belay the rope round his ice-axe, which was inserted in a crack right up to its head.² We consulted as to which side of our rock a fall might occur and Napier arranged his belay accordingly, i.e. to

¹ Marked *Brèche supérieure* in the illustration, *La Montagne*, 1910, facing p. 344.—*Editor*.

² See *La Montagne*, 1910, pp. 321–59, 397–440, especially the marked illustrations facing pp. 338 and 344. In the latter, the scene of the accident is about two-thirds of the way up the extreme *left-hand* ice couloir. The route attempted is a variation of the *right-hand* one shown on the illustration facing p. 338.—*Editor*.

safeguard a fall to the right—the likely direction; without the assistance of this belay he could not hope to hold the rope in case of a fall. During this time we began to suffer slightly from cold and mild cramp in the fingers. As cutting steps with one hand proved a tedious job, Bicknell's progress was very slow. On one occasion he asked us whether, in view of the lateness of the hour, we should prefer to turn back. We replied that we left it entirely in his hands; he decided that it would probably take less time to complete the traverse to La Grave than to return down the loose rocks up which we had come. He appeared quite confident, and on two occasions said that a few more steps would get him over the difficulty.

'After about half an hour's cutting, and when he was some 60 ft. above Napier, without a word of warning and with no apparent effort to stop himself, Bicknell fell from his steps and shot down the ice slope to our left. When he had fallen the full 120 ft. of the free rope the strain came on Napier who, with his belay rendered useless, the fall occurring to the *left*, was pulled from his position; Napier had fallen some 25 ft. when Procter, dragged against the rocks to his left, held the rope, with the full weight of Bicknell and Napier on it; the rope, however, was drawn over Peter's shoulders so that the latter could take some of the strain.³ Napier was lying on steep rock 20 ft. below Peter, with Bicknell hanging out of sight some 70 ft. below Napier. The latter at once managed, by getting hand-holds on the projecting rock, to take some of the weight, while Procter secured the rope round a suitable belay. As the full weight of Bicknell was still on Napier, it was necessary to see if Bicknell, from whom we had heard no signs of life, could be brought to rest on a ledge. To do this, Procter eased the rope round the belay, while Napier lowered himself to a more secure ledge. Bicknell's full weight was still on the rope, and so Peter detached himself and climbed down to where his father was, using the rope between Procter, Napier and his father to lower himself by. It was at once evident that Raymond Bicknell had been killed outright, as his skull was completely smashed in. It was obvious, in fact, that he was dead *before* his fearfully rapid slide had tautened the slack of the rope.

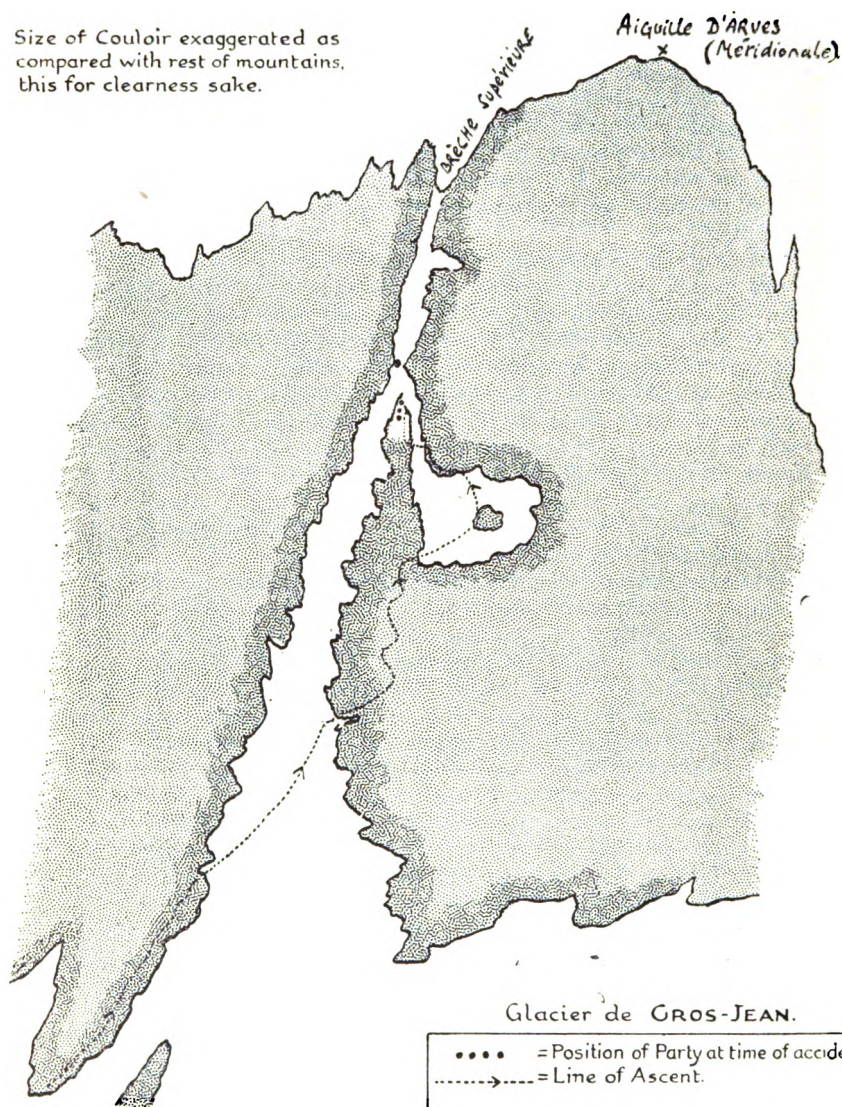
'It was essential for our own safety in descending that we should have the second rope which was attached to Bicknell. We decided, accordingly, that the only course open to us was for Peter to detach the body and to allow it to slide down on to the glacier below.

'With the help of the spare rope we made our way safely down on to the glacier, which we reached some 4 hours later,

³ It is interesting to note that the rope—which rendered such invaluable service—was a light one by Frost, in its second season.—*Editor.*

and leaving the body where it had fallen we returned to Valloire, getting there about 11 P.M.

Size of Couloir exaggerated as compared with rest of mountains, this for clearness sake.



'It is impossible to state the cause of the accident. That Bicknell gave no warning cry, that he made no apparent effort to stop himself, and that his last remark was one of confidence, seem to indicate

that it was not an accidental slip. It would appear more probably to have been due to some form of heart failure, or violent cramp to which he had been subject as the result of an attack of phlebitis in the leg in the winter of 1924-25.

'The climb itself cannot be described as easy, but in attempting it we were undertaking a task of no exceptional difficulty, especially bearing in mind the great reputation Bicknell held as one of the leading amateurs of the day.'

[The subsequent proceedings in Valloire were carried out with great despatch and Raymond Bicknell was buried there.

Monsieur Pierre Dalloz, the distinguished French mountaineer, gave every possible assistance. He accompanied the search party of La Grave guides who brought the body down from its resting-place on the Glacier de Gros Jean. He then stayed the night with the relatives and accompanied them subsequently to La Grave.

M. Dalloz's kind and disinterested behaviour will not be forgotten by the friends and relations of Raymond Bicknell, and the JOURNAL avails itself of this opportunity of expressing to M. Dalloz the grateful thanks of the Alpine Club.

As the narrative points out, the immediate cause of the slip will for ever remain obscure, but one possible charge against Raymond Bicknell—that of rashness in attempting an expedition beyond his party's powers—falls automatically to the ground. The performance of the young survivors was superb. The feat of Mr. Procter in holding the fallen, Sir Joseph Napier's own accomplishments, and last, but not least, Mr. Peter Bicknell's courage in going down, unroped, to his father, and finally his skilful descent, shaken as he was mentally and physically, during that nightmare 4 hours, in the all-responsible position of last man, will stand high in the annals of modern mountaineering. We can only add that the collective deeds of the party were worthy of any veterans or of their intrepid, erstwhile leader himself.]

THE ACCIDENT ON 'THE MON.'¹

THIS peak, *ca.* 16,500 ft., in the Dhauli Dhar range of the Himalaya, and of great steepness, as are most of those peaks, was the scene of the lamentable accident which occurred to Major H. D. Minchinton on June 3 last. Through the kindness of Lt.-Colonel H. Holderness, D.S.O., commanding 1/1st K.G.O. Gurkha Rifles, we are enabled to publish a full

¹ The name of the mountain, according to General Bruce, has been *indianized* from that of General E. D. Money.—*Editor.*

account of the tragedy abridged from the proceedings of the Court of Enquiry :

Rifleman Bhagtbir Thapa states :—

‘ I left Dharmsala on Thursday, June 2, with Major Minchinton and Rifleman Gunjsing on 4 days’ leave for the purpose of mountain climbing. We reached Triund on the evening of the 2nd of June.

‘ On the morning of June 3 we went out for the purpose of climbing a hill called locally the “ Mon.”

‘ We climbed the “ Mon ” and then decided to return. Rifleman Gunjsing started to go down first, Major Minchinton in the middle and I was the last. We were all roped together. We had to cut steps, as the snow was hard, in order to get down. We had not gone far when I slipped and fell down a short way, but was able to check myself from going far. Finding I had got out of the footsteps cut by the others, I attempted to re-join our path, when I was suddenly jerked off my feet and pulled down the hill. It is impossible to say how far I fell, but it must have been several hundreds of feet, and the only reason why I did not suffer more injury was because I was able during my fall to constantly check myself though unable to completely stop myself, because each time I attempted to do so I was dragged down by the rope. I received injuries to my head and right shoulder. When I was finally able to stop, I followed the rope to where Major Minchinton and Rifleman Gunjsing were. They were quite close together. On seeing me Major Minchinton asked me how I was and said that we had all three better rest for a few minutes. Major Minchinton and Gunjsing were then found to be unable to proceed further, so I took the rope off both of them, and on the Major’s suggestion went down for help. I found some gaddies and sent them up to the Major. The gaddies however soon returned. They said they had put Major Minchinton into a safe place but were unable to bring him further down, and they advised my going to Dharmsala and getting help from the regiment down there. In the neighbourhood of Lakha I met a sahib and his wife, whom I at once informed, and then went to Triund, where I passed the night.

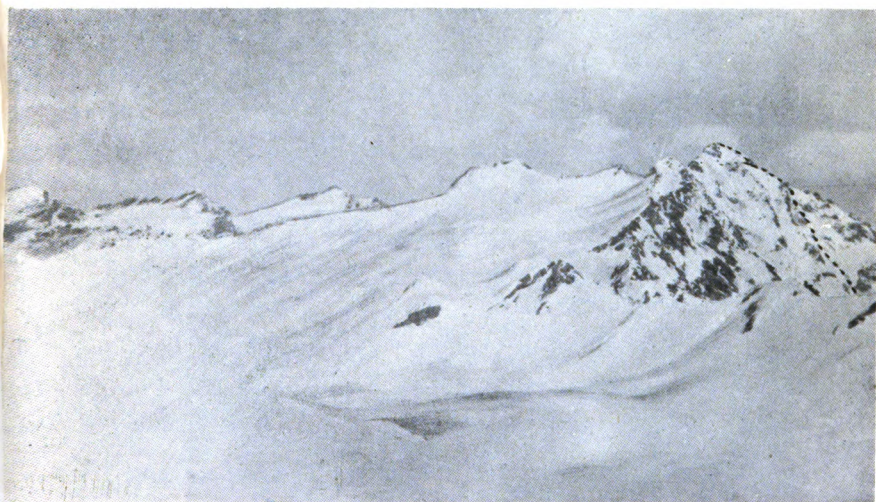
‘ The time the accident took place was about 1 P.M.’

Lieutenant G. F. Bain-Smith, I.A.O.C., states :—

‘ On the 3rd instant my wife and I, having walked up to Triund forest bungalow, had breakfast with Mrs. Minchinton, who pointed out a hill on which Major Minchinton was climbing.



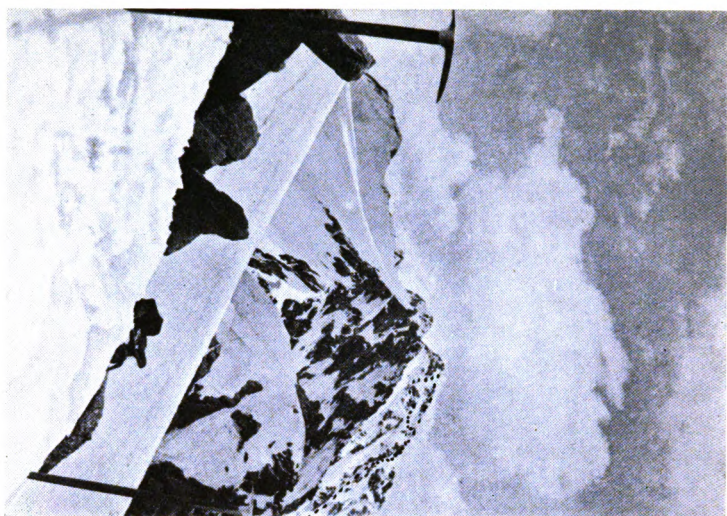
GENERAL ASPECT OF DHAULI DHAR
RANGE
from above Lakha.



APPROXIMATE
SCENE OF FALL

PHOTO. J. W. RUNDALL.

THE 'MON' FROM CHAMBA SLOPE OF INDRAHAR PASS.



THE 'MON' FROM SUMMIT OF
INDRAHAR PASS.

Dotted line is Captain Rundall's 1925 line of ascent.

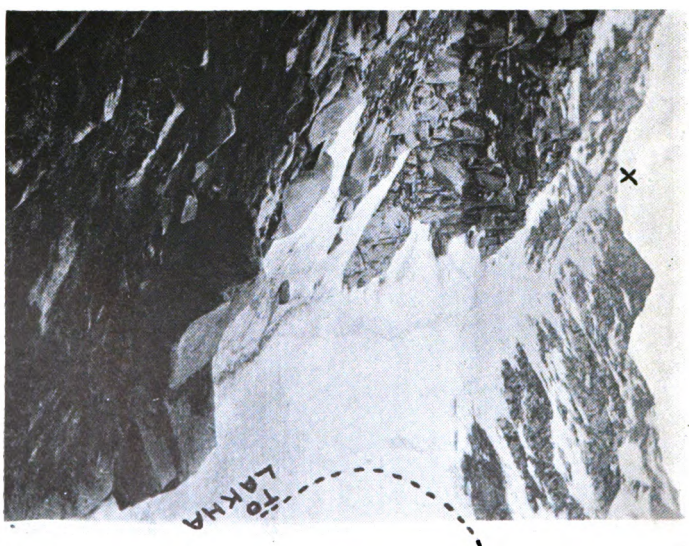


Photo. J. W. Rundall.

INDRAHAR PASS, 14,600ft.
Dotted line indicates part of route to 'Mon.'

We went on to Lakha, and at 2.30 p.m., as we were about to return, saw a Gurkha staggering along a path. He pulled himself together only enough to convey that Major Minchinton had had an accident. He said that Minchinton was about an hour's walk away. Had I known the difficulties ahead I would have sent at once to the Gurkha mess for help ; though, even so, this party could not have arrived much before nightfall.

'My wife went back to Triund to get help and I took a tiffin coolie on with me. The Gurkha attempted to come with me to show me the way, but was left behind. Having climbed 2000-3000 ft. I heard Minchinton calling and saw him in the middle of a snow slope. As I had no ice-axe or grass shoes it took me until 4.30 p.m. to cross an intervening snow slope which had a frozen crust on it ; kicking steps through the crust with stockinged feet was the only method practicable. Having crossed I found the second Gurkha sprawled face downward on a rock to which he had crawled off the snow slope. He had bad snow scrapes and cuts on his face and head. I left him there temporarily.

'Minchinton was about a hundred yards out from the rock on the slope. As I approached he was fully conscious and had changed from calling out in Hindustani to English, after he heard me answer. When I reached him he was still able to talk, though only at intervals. The only coherent information he gave was "we must have fallen 1000 ft. I cannot understand how any man can be alive after this. I have been here 3 or 4 hours." His climbing rope was curled up underneath him. He was cut in many places about the head and hands but not deeply ; the main injury seemed to be his back, which was twisted. I gave him brandy from his rucksack and chocolate, which he could not eat. He did not appear to be in much pain until I started to drag him down the slope on my coat. He then cried out, and was delirious the whole time I was dragging him down.

'I moved him about 500 ft. down. The snow began to freeze over at 6.30 p.m. I found I could no longer keep him under control (I was obliged to let my coolie stay behind, as he could not tackle the snow slope). I then went about one mile downwards and across the ice slopes and got two shepherds to come and help me. On my return Minchinton was unable to speak, but was conscious. We got him down another 500 ft. Whenever we moved him he was in great agony. Having reached rough and frozen snow we could get no further, and I sent one man down for more men. He did not return.

' At about 7 P.M. I went down again myself, and after great difficulty got four more shepherds. They were extremely reluctant to help. I sent these men back to Minchinton, but as I was exhausted could only follow by crawling. When I arrived by Minchinton I found that he was struggling, and even when I spoke to him he did not recognize me. His struggles prevented our moving him more than a few feet, the snow by this time having turned to ice. I sent the Gurkha who could just keep on his feet down with two men and made repeated efforts to move Minchinton. At sunset the shepherds deserted me.

' I stayed with Minchinton, who was now completely unconscious, whether alive or not I cannot say, for about half an hour after dark, but soon realized that nothing could remain alive on that snow after dark. The wind was very strong and there had been intermittent hail storms all through the afternoon. I had previously covered Minchinton with my coat. I got down to a fire below the glacier about 1½ hours after sunset and found Mrs. Minchinton with some men whom she had brought. None of these were capable or equipped to tackle the snow in the dark. I sent Mrs. Minchinton back to Triund, and on the arrival of the first working party at 3 A.M., escorted them a short distance to point out where Minchinton lay. In this evidence I mentioned certain difficulties ; these are merely mentioned in order to give reasons for the delay in moving Minchinton.'

Questioned by the court :—

Q. 1. Have you done much climbing previously in the snow ?

A. 1. None at all.

Q. 2. You say you heard first about the accident at 2.30 P.M. What food arrangements had you for yourself after that time ?

A. 2. I had a slab of chocolate, which I lost after trying to give it to Major Minchinton, and at 2 A.M. on the 4th received a chupatti from one of the shepherds. I got breakfast at 9.30 A.M., my previous meal being 9.45 A.M. on the 3rd.

Q. 3. When you covered Major Minchinton with your coat, how were you dressed ?

A. 3. I had a khaki shirt, khaki shorts and a pair of stockings on.

Q. 4. At what time did you get any warmer clothes ?

A. 4. At 9 P.M. one blanket from a shepherd,

Q. 5. Have you suffered from any injuries as a result of what you did ?

A. 5. My feet are slightly frostbitten.

Q. 6. When you were dragging Major Minchinton along, had you slipped, how far do you think you would have fallen ?

A. 6. It is impossible to say ; the snow slope was about 2000 ft. down.

Captain J. O. Fulton, 1/1st K.G.O. Gurkha Rifles, states :—

‘ At about 9.45 P.M. on the evening of June 3 I received word from Captain Carrey, I.M.S., that he had heard that Major Minchinton had had an accident above Triund and requesting 20 men to be sent to Triund to bring him down. Along with Captain O’Ferral and 20 men I proceeded at once to Triund. Captain Carrey followed a few moments later. Half-way up to Triund we intercepted a letter from Mrs. Minchinton to Colonel Holderness which showed that the Major was still out in the snow. We had previously been given the impression that he was either at Triund or being brought there. On this we sent word for a party to be sent up equipped for climbing.

‘ On arrival at Triund at about 1.20 A.M. on the 4th we decided to equip 8 men as well as possible and to proceed to search for Major Minchinton.

‘ On arrival at the huts about a mile above Lakha we found Lieutenant Bain-Smith and one wounded Gurkha. Lieutenant Bain-Smith was thoroughly exhausted and shaking with cold, but was able to come far enough with us to point out to us where Major Minchinton was.

‘ There was an icy wind blowing and the surface of the snow was frozen, so there was little hope of finding the Major alive. At 5.15 A.M. we reached Major Minchinton. He was quite dead. The upper part of his body was frozen stiff, but his legs were limp. We then managed to drag the body down to a patch of rocks, cutting steps as we went along ; the men being laden with stretchers were at this stage some 500 ft. below. While the men were coming along we decided on the route that we should bring Major Minchinton down by. This entailed cutting a path across the nullah of a distance of about 70 yards. After working for an hour and a half, Captain O’Ferral and myself cutting steps while the men rested and strapped Major Minchinton on to one of the stretchers, we were able to cross this nullah, using ropes as we went along. The

snow slope was about 2000 ft. down. Directly we had got Major Minchinton across the bad bit, I went on ahead to give the news.'

Q. 1. Is this the first time you have used an ice-axe ?

A. 1. Yes. I have never used an ice-axe before.

Captain J. L. O'Ferral, 2/1st K.G.O. Gurkha Rifles, states :—

' On the evening of June 3 I accompanied Captain Fulton and 20 men up to Triund and afterwards went with Captain Fulton and 8 men to the huts above Lakha, where we met Lieutenant Bain-Smith, who was able to direct us to the place where Major Minchinton was. We reached Major Minchinton at about 5.15 A.M. Captain Fulton and I then dragged Major Minchinton down to some rocks, some forty yards below.

' The men arrived shortly after, and while they were resting Captain Fulton and I cut steps across a nullah preparatory to having the stretcher brought across. The snow was treacherous, being soft in places and very hard in others ; while the stretcher was being carried across with Major Minchinton on it I slipped, and had Captain Fulton not been holding the other end of the rope I might have fallen to any distance. When we reached the far side of the nullah Captain Fulton went ahead to take the news to Mrs. Minchinton, while I superintended the further removal of the body. The going was difficult and the men carrying the stretcher had a very hard time of it.

' About half-way to the huts, at about 8 A.M., Captain Hamber and some 40 other Gurkhas came to our help, and the body was then taken in reliefs to Triund and, later, to Dharmsala.'

[In addition to a letter and the proceedings of the Court of Enquiry forwarded by Colonel Holderness, we have received letters from Colonel E. M. Lang, Major P. H. Sharpe, Captain J. W. Rundall and others ; to all of these we return our best thanks. Captain Rundall, who has twice made the ascent of The Mon, is convinced that ' Major Minchinton's fall cannot have been less than 2000-3000 ft. ']

No further comments are required ; the accident appears to have been one of those that will always occur as long as mountaineering exists. It might, of course, be said that had Major Minchinton occupied the position of last man on the rope no accident, probably, would have occurred. We must

remember, however, that he was engaged in training his Gurkhas in mountaineering. The conduct of all ranks, and especially that of Lieutenant Bain-Smith,² was magnificent and worthy of the traditions of the British and Indian Armies alike.

THE ACCIDENT ON MOUNT EGMONT.

A FATAL accident involving the loss of two lives occurred on Mount Egmont, 8260 ft., North Island, New Zealand, on May 11, 1927.



MT. EGMONT, N.Z.

We are indebted to Mr. A. P. Harper for many of the details, as well as for the topography of the mountain.

A party consisting of Captain N. Baines, Messrs. F. Latham, P. Taylor, and D. Allen, none of whom had had much mountaineering practice, made the ascent in perfect weather but wintry conditions. In the descent they occupied, roped, the following order: Baines (leading), Taylor, Allen, and Latham. Only two of the party appear to have possessed ice-axes. Some 700 ft. below the summit a slip occurred on hard wind-blown snow, and the whole party slid or rolled down for some 500 ft., finally bringing up on a kind of snow plateau. Latham was fatally injured. Taylor, severely hurt, attempted to drag down the still living Latham; Baines and Allen, who were also much injured, meanwhile freeing themselves from the rope. Taylor

² The *London Gazette* of September 30 announces that the King has awarded the Albert Medal to Lieutenant G. F. Bain-Smith, R.A.

and Allen were duly rescued by a party under the leadership of the well-known Mt. Cook guide, Murphy, but Latham had expired from his injuries, *en route*; Baines, meanwhile, having disappeared. The body of Baines was found by a search party on May 13, at a spot approximately half a mile from the scene of Latham's death. 'The deceased had apparently crawled on his hands and knees for some distance and had then fallen over a bank some 20 ft. high' [*Press reports*].

Murphy and the search parties had accomplished all that was humanly possible and the conduct of the survivors, of whom Allen was aged only sixteen, and who are now reported to be progressing favourably, is highly commended.

'Egmont is a walk—a volcanic cone, quite perfect—in summer you can walk up on scoria slopes, but in winter some 2000 ft. or more is snow-covered and large patches of snow remain on it through the summer and in the crater.

'I, as a matter of fact, made what I believe to have been the first snow ascent in 1895 and by exactly the same route as the party took, but in those days there were no tracks or mountain-houses. In the winter the snow slopes are steep, somewhere about 40°, but easy to walk up and glissade down if the snow is in good order—as we found it in 1895—but when the Baines party made the ascent there had been high winds and considerable cold. The light snow was thus blown off and the slopes were evidently partly hard snow with patches of glazed surface, and, here and there, of practically blue ice (there is no glacial ice on the mountain). Murphy—a first-class Mt. Cook guide—appears to have warned the party to look out for this ice, which he foresaw owing to weather conditions. From Fantham's peak (a shoulder of Egmont) to the top is some 1700 ft.; there are no real cliffs or rocks there, but only many outcrops of hard snow . . . ' [*extracts from a letter from Mr. Harper*].

[I should like to add a short tribute to the memory of an old brother officer, Noel Baines, more especially as in the latter stages of the war he was under my immediate command. Gifted with unusually good linguistic and literary powers, he was of high intelligence and certain to make his way in the world. On the outbreak of the war, he enlisted, very young, as a private in the 18th (Public Schools) Bn. Royal Fusiliers—commanded by another old friend and brother officer. With this unit he proceeded to France in 1915, where he was soon gazetted as an officer to the Royal Scots. He served in the Royal Scots in the Dardanelles, Egypt, Mesopotamia, and, finally, for the last two years, with the 1st Bn. in Macedonia. Severely wounded during the brilliant Guevgueli operation of June 1918, he was on recovery posted to me as a liaison officer. Rumania was just then re-entering the war, and proceeding there he

served with General Berthelot, commanding the so-called *Armée du Danube*, and General Prezan, C.-in-C. of the Rumanian Army. Baines's services to Rumania were rewarded by the Order of the Crown. Later in 1919 he rejoined the 1st Royal Scots and was stationed at Tiflis and Kutais in the Caucasus. He resigned his commission about 1920, when I lost sight of him, although he continued to correspond with me. An adept letter-writer, his news kept me in touch with his wanderings, which eventually terminated in New Zealand. He had always, although very limited in practice, been devoted to climbing. His interest in the three Everest expeditions was profound. His last letter to me, received on the very day of his death and dated Wanganui, March 27, 1927, contains the following: ' . . . I did a great tour of the South Island this summer, nearly 3000 miles, and saw much that was very fine. The Milford track is magnificent and the Franz Josef glacier unique. . . . I know, however, nothing finer than the view from my bedroom window of Ruapehu. I have been to the huts there every winter so far, and I can quite honestly say that they have been the best days I have spent out here. Egmont is a fine mountain and I hope to go there next holidays. . . . '

Well, he went, and one of our minor empire-builders and single-minded patriots met his fate. May he rest in peace.—E. L. S.]

REVIEWS.

George Leigh Mallory. A Memoir. By David Pye. Oxford University Press.

THIS is a worthy memorial to a great mountaineer and to a singular and attractive personality. Mallory's life, apart from his mountain climbing, was the not unusual one of a hard-working and cultivated man, strenuous in his profession, with intellectual and artistic interests and many friends. For those who knew him, an intense vitality and a vivid personal charm threw a glamour over all he did. By the world at large he will not be forgotten, owing to the tragic and romantic circumstance of his last mountain campaign.

But this was not the material of which a full-length 'biography' could be composed; and Mr. David Pye has, rightly, not attempted it. With impartiality and an excellent sense of proportion he has sketched a very human portrait, omitting what was immaterial, compressing what was usual, and selecting with skill from correspondence, conversation, incident and opinion just so much detail—sometimes only a few words of citation—as might serve to bring the portrait alive.

A man of varied interests, varying moods and irregular if continuous development, George Mallory probably never made quite the same impression upon any two of those who knew him.

Inevitably Mr. Pye's faithful sketch of the Mallory he knew will fail, in the same degree, to correspond with all these different impressions. That is unimportant. He has produced for posterity a veracious and lively picture of a man whose peculiarity it was to appear to others to make every movement, in action, correctly and harmoniously, with supreme and joyous unconcern, but to be desperately concerned mentally—not always with a like success—to arrive at a correct attitude towards the purpose of every action and the meaning of each emotion.

Probably Mallory was completely 'Mallory' only when in full action, leading a successful and where possible a novel and difficult mountain climb. It was only at such moments that the current of personality ran clear and single—undistracted from within, and exceptional in its suggestion of physical and nervous concentration. It is for this reason that we may regret that the memoir does not give us more of such pictures of him, on his great British or Alpine climbs, by those who shared in them. For them we might have been content to sacrifice much of his relationship with intellectual Cambridge. Climbing mountains was the breath of life to him, as well as the finest fashion of living. And yet we gather that some of his Cambridge contemporaries were even unaware that George Mallory was a climber at a time when mountains were already the centre of all that was not derivative in his thought and enthusiasm. Again, the story of the Everest campaigns is told, or is left to tell itself, with admirable restraint and effect. But, necessarily, here the note of endurance, suffering, and coming tragedy predominates. The figure of the man, returning twice to face conditions which 'took any pleasure out of mountaineering' and dangers the extent of which he perhaps alone never underestimated, looms always larger upon the imagination. In reading the last phase, when, with every consideration of domestic happiness and of an honourable career advising him to stay, he yet obeyed the call of a duty he felt to be owing to that which had given him so much in life, the least sympathetic with such a point of view will not be able, I think, to refuse the word 'heroic.' But this is not the atmosphere of joyous ease, of hopeful, confident sunlight, which gave to Mallory's twenty years of mountaineering their peculiar individuality. Sheer love of adventure, indomitable youthfulness—these were the dominant and sustained notes. The purposeful campaigns, the shadow at the end, are not discordant; but they are less characteristic.

Mr. Pye has handled his difficult material with noticeable skill and sureness of touch. He is master of a lucid, pregnant style. He rarely allows himself to express his own opinions or to sum up; but it is enough to read, say, his views on British climbing or the eloquent but restrained paragraph at the close, to know that this, the first memoir of a mountaineer simply as a mountaineer, is worthy of its subject and of our gratitude.

G. W. Y.

Letters of Gertrude Bell. Selected and edited by Lady Bell. 2 vols. Illustrated. Ernest Benn, London, 1927. Price £2 2s.

THIS book consists almost entirely of Miss Bell's letters to her parents. Most of the first volume relates to her travels before the war in the Persia-Arabia region. It ends up by telling us how her intimate knowledge of the people caused Admiral Hall and Dr. Hogarth to get her relieved from her early war work under Lord Cecil in order that she might join Intelligence at Cairo; and how, as soon as the Viceroy hears that she is there, he gets her sent to India, and so on to Basrah. Nearly the whole of the second volume is taken up with her post-war work at Baghdad, where she was Oriental Secretary to the High Commissioner of Iraq. Thus most of the book is confined to the years 1904 to 1926 and to her earlier experiences in Italy, Germany, Persia, and round the world. It would be inappropriate to deal with these matters in the *ALPINE JOURNAL*; especially after the many noble tributes already paid to Miss Gertrude Bell and her work.

What we are concerned with is her play; and, owing to force of circumstances, her play in the Alps was restricted to the years 1897-1904, and so to an all too small part of the book. One cannot help wishing that chance might have led Miss Bell's parents to take her to the Alps before she was twenty-nine. Luckily they did so then; and she made one or two minor expeditions from La Grave. Back she comes at the next opportunity—two years later—and rounds off her first season of serious climbing with Les Écrins and a traverse of La Meije. An unorthodox proceeding of that sort—rather like learning to row on a sliding seat—would be enough to turn any less versatile woman into an inveterate peak-bagger. No peak-bagger could, however, have given us such accounts of her climbs; or shown in almost every sentence that the joy lies in scheming and doing the climb, rather than in having done it: and no one, peak-bagger or no peak-bagger, could have written in such a delightful way, if she had had the least notion that her letters would ever be published.

As one reads them one seems to be following her on another rope; and it is for that reason, more than for any other, that future generations of climbers will revel in them—not because she made a clean sweep of the unclimbed pinnacles of the Engelhörner, or because she makes a famous attempt at a new route up the Finsteraarhorn; but because she makes us feel cold when she feels cold, and thirsty when she feels thirsty, and as if we were nearly 'coming off' when she feels like doing so.

One cannot mention the Finsteraarhorn without referring to the most able and, with one exception, just appreciation of this book in *The Times*. There is no need to say that whoever wrote it has never enjoyed going up a hill; or, in commenting on what is one of the best descriptive essays in mountaineering literature—and that is saying a lot—he would not have suggested that he would have preferred to hear more about Miss Bell—precisely what is not very clear—and less about 'the exact manner of her climbing of the Finsteraarhorn.'

One has to be a Ruskin before one can be permitted to say things like that ; and I wonder how many non-climbers will this critic find to agree with him.

I much prefer the criticism of a past-master of English prose, the *doyen* of mountain-exploration. After commenting on Miss Bell's Alpine correspondence, he concludes : ' I find the accounts of the Finsteraarhorn and the Italian side of the Matterhorn the most thrilling things in Alpine adventure . . . because they tell a story and do not aim at an effect.'

I started the book directly after dinner ; and yet I felt selfish annoyance when Miss Bell found that some French caravan had filched the tea stowed away at the Schwarzegg. I became inclined to wriggle into some warmer position, and began to think what a long way it was to the Grimsel, when she was suddenly confronted with a second night out in getting off the Finsteraarhorn. Scarcely any other climbing book makes one do things like that ; and the fact that this one does greatly increases the debt which many besides mere members of our Club owe to Lady Bell for having kept the letters of her stepdaughter, and for allowing us to have them. She has, for us, cut the climbing part of the book too short, but we willingly forgive her irritating statement that there is at least one more long letter which we might have had ; for this statement raises a hope that the Editor may secure it for the JOURNAL,¹ where we should like to read it best of all.

The Art and Sport of Alpine Photography. By Arthur Gardner. Illustrated. H. F. & G. Witherby, London, 1927. Price £1 1s.

IN 'The Art and Sport of Alpine Photography' Mr. Gardner has given us a most readable book, and one that will act as an inspiration and help to all photographers whether they are taking up the hobby as novices or are old hands. Mr. Gardner takes his photography very seriously, and the chief lesson of the book may be expressed in his own words : ' A few really satisfactory pictures are worth far more than a monotonous series of average quality.'

The book is illustrated with some 150 photographs, and every one is a real picture. The writer has never seen a collection of Alpine photographs so good in composition and technique, and practically every one is made to illustrate some definite point in the text. Mr. Gardner does not introduce any technical hints or suggestions, presuming that his reader has mastered the elementary technique of his craft. This is all to the good, but I cannot help feeling that some of his readers would much like to know whether he uses a panchromatic plate and what strength of screen, if any, he employs and whether he makes use of an exposure meter, etc.

The book is divided into four principal chapters. The first is 'Stating the Case,' in which the author dwells on the pleasures of a photographic holiday in the Alps and discusses the best centres and

¹ The letter appears in the present number.—*Editor*.

the advantages of climbing below the snow line rather than on the high peaks if you wish to get the best effects. To the majority of the members of the Alpine Club climbing will always be the first consideration and photography will hold a secondary place, and when one is on the rope with non-photographers on a big expedition the opportunities of taking satisfactory views will be few, if the harmony of the party is to be preserved; but even the most energetic must have some off days, and these can be devoted to serious picture-making. There is no doubt that from the lower peaks by far the most satisfactory pictorial effects can be obtained; a striking example of this point is the beautiful view of the Rosengarten taken from Ciampedie and the Durupi di Larsac from the same view-point, which most of us who have climbed the Rosengarten peaks have, I fear, entirely missed. The second chapter treats of 'Composition and Foregrounds,' and here is a wealth of highly useful hints which will be of the greatest help to the practised photographer as well as to the novice. Special stress is laid on foregrounds, which are really the most important question in the formation of a picture, and the author divides this subject into four sections, dealing first with Water, and here amongst other useful hints the importance of including the near shore of a lake is insisted upon, an omission that is all too frequent in the usual snapshot. Secondly Trees, then Rocks, and finally Ice and Snow are dealt with, and each group is illustrated with a delightful series of pictures. The third chapter is devoted to 'Weather, Lighting and Seasons,' and here it is pointed out that weather conditions which would make high expeditions impossible often give the photographer his best chance of getting really striking effects. 'Mountain Portraits' forms the subject of the final chapter, in which the author describes the sport of selecting a special mountain and obtaining photographs of it from every side and under varied conditions of lighting and weather. The three peaks he selects to illustrate this form of treatment are the Weisshorn, Matterhorn and Mont Blanc, and he gives us a most fascinating series of portraits of these giants from every side and under very varied atmospheric conditions, and suggests the possibility of carrying out this treatment with other less-known peaks. 'The Art and Sport of Alpine Photography' is full of just the sort of helpful hints that the serious photographer wants, and is a valuable addition to photographic literature and a book that every climber who carries a camera will do well to read.

H. R.-S.

*The Experiences of an Explorer.*¹

THE second title of this volume may serve to conceal its main purport. For it is in substance a condensed autobiography of the author. Taken as such it will be found to possess the quality

¹ *The Light of Experience: a Review of Some Men and Events of my Time*, by Sir Francis Younghusband, K.C.S.I., K.C.I.E. London: Constable & Co. 1927.

essential to the success of works of this class. Sir Francis Younghusband's life has been full of various adventure and occupation ; it has brought him into contact with many strange places and distinguished men. But it is his ingenuous self-portrait that links his pages together and gives to the volume as a whole a personal interest. The reader follows willingly the intrepid young adventurer across deserts and glaciers, lives with the frontier officer in the remote fastnesses beyond Kashmir, shares his travels as a *Times* correspondent in India or the Cape, or accompanies him in the crowning event of his career, the expedition to Lhasa, which he conducted with so much vigour and success.

Sir Francis was born a traveller. At the age of twenty-two, a young officer in the King's Dragoon Guards, then stationed in India, he succeeded in getting permission to travel on duty for several months in China. Seizing Fortune by the forelock, he took advantage of his leave to carry out a most adventurous journey from Peking to Calcutta, across the Gobi Desert and the Karakoram. His success in this novel and hazardous undertaking proved the first step on the official ladder. Younghusband's interest was now centred on Frontier politics, and he exchanged the Army for the Indian Political Department. In 1889 he was sent on his first political mission, to counteract the Russian advance on the Pamirs and the borders of Afghanistan. His subsequent adventures as Political Resident at Hunza and in the relief of Chitral are dealt with summarily ; they have been told at length in previous volumes. In 1894 Lord Curzon, on his travels and acting as a correspondent of *The Times*, joined him in the mountains. Lord Curzon, Younghusband writes, 'was then both a pleasure and a trial.' But in subsequent years he found in him the best of friends. From Simla the Viceroy wrote begging Younghusband to look on him 'not as Viceroy but as an old friend and fellow-traveller.' Sir Francis's comment is shrewd : 'The first part of the injunction was difficult to obey. It would have taken a man with a larger imagination than I have not to look upon Lord Curzon as Viceroy !' In other passages Sir Francis records his warm if by no means uncritical appreciation of his chief. But we hold that he is mistaken in suggesting that it was the influence of Oxford rather than an inborn grain of conscience that created in Curzon that aloofness and self-assertion which hampered him through life. He came to Oxford from Eton 'a very superior person.'

In 1909 Sir Francis finally left India, after enjoying for three and a half years the pleasant post of Resident in Kashmir. On his return he was naturally invited to join the Council of the Royal Geographical Society, of which he was already a Gold Medallist, and in 1914 Mr. Douglas Freshfield, on becoming President, was fortunate in securing Sir Francis's services as one of its Honorary Secretaries. But for the War the attack on Mt. Everest, planned and worked for nine years before by Lord Curzon as Viceroy, but postponed owing to the existing political obstacles in Nepal and

Tibet, would have doubtless been speedily put in hand. It was not till 1921, when Sir Francis had succeeded to the Geographical Presidency, that the long-looked-for effort could be undertaken with the joint support of the Alpine Club and the Geographical Society. Under the auspices of Sir Francis and General Bruce there was no question of the adventure being pushed to the end. Some day we may possibly learn how that end came. At least it has been proved that the highest mountain in the world, the culminating peak of the Chomolungma Group, is not inaccessible to a party of mountaineers provided with adequate transport. That in 1921 the transport proved inadequate was due wholly to bad weather and ill-luck.

On one of his pages Sir Francis writes, 'the exploring spirit was on me.' His readers will probably conclude that it has been on him all his life, urging him to some form of exertion, muscular or mental, political or metaphysical. In his last chapters we are called on to follow him into a new field, beyond even Himalayan heights! Ill satisfied with the stiff Evangelicalism of his early surroundings, he found leisure during his sojourn in the wilds to seek for a broader outlook. Starting with the works of Herbert Spencer, he found little help in 'that dreary old philosopher.' So, on his return to England, he took courage to throw himself at the feet of a famous Cambridge metaphysician. The Professor was interested, and welcomed cordially the man of action who came to him with a singularly open mind. Their intercourse led to Sir Francis joining the Aristotelian Society. He describes with sympathy the participants in its debates. They encouraged him to look forward to the creation of a 'spiritual contribution that will sweeten the life of all mankind.' The nature of this new religion remains undefined. Mountaineers may however, some of them, be able to appreciate Sir Francis's eagerness to follow the gleam of moments of more than mortal vision. But such high matters do not come into the scope of this JOURNAL.

In conclusion we find this an occasion to address a protest, or rather a petition, to publishers. Sir Francis Younghusband has been both a voluminous and a versatile book-writer, and the work under review is in a sense a summary of his earlier contributions to the literature of Travel and Thought. It is a pity no list of them is provided. Publishers are too apt, if they advertise at all the previous publications of an author between the covers of his last book, to advertise only those they have themselves brought out. This practice is an injury to the author, and one that as a reader the critic has frequently cause to resent. D. W. F.

Mes quatre premières années de Montagne. By Jean Coste. Pp. v + 164. Illustrated. Paris, G. Ficker. 1927.

It is always pleasant to read the unedited diary of an enthusiast. This little book should give an hour's delight to any reader. We note that the cost of publication has been defrayed by subscriptions

raised by the friends of the deceased author. M. Paul Helbronner has written a charming preface.

The diary is dedicated : ' pour l'Ubaye, ce pauvre pays si beau dont je suis navré de me voir presque seul à comprendre toute la poésie.' It commences with a boy's adventures, with enthusiastic and equally irresponsible companions, in the stony and desolate glens of the Cottian Alps. The style of writing is spontaneous and delightful ; it is one of those narratives of which only a Frenchman is capable. Gradually, as the diary unfolds itself, we perceive a sort of feeling of responsibility attaching itself to the growing technical skill of the writer. The slips and tumbles of his earlier adventures—Le Tourillon—are things of the past. A rope is sometimes taken even if a frayed bit has to be cut off *en plein d pic* ! Guides are no longer considered as mere encumbrances and obstructionists. A long ice couloir on Monte Viso gives an insight on new problems for a cragsman (hitherto) pure and simple.

The beauties of névé and glacier are revealed in a descent of Mont Pelvoux by the Glacier des Violettes. The Tête de Moyse followed by three nameless and abrupt Aiguilles give the author a new ascent. Later another difficult tooth (2829 m.) is scaled and is now named Aiguille Jean Coste after its young conqueror. Wonderful days are all these ; Jean Coste starts on a bicycle, he pedals for miles, he clammers over numberless clapiers, he turns heads of glens, he climbs his Aiguille and regaining his bicycle late at night sometimes coasts 18 kilometres in 30 minutes to regain his home in the following dawn ! The diary was, obviously, never meant for publication. It is all the better for that ; glowing descriptions of somewhat dreary scenery, but to the author a dream of beauty and fairyland ; adventures reckless, escapes, but through it all an entrancing *joie de vivre*. La Meije claimed a future author as well as mountaineer.

The pity of it all. France cannot spare these splendid boys so willing to sacrifice everything—' pour la Patrie par la Montagne.' Yet they know best and rest content.

A Naturalist in Himalaya. By R. W. G. Kingston, M.C., M.B. A. & F. G. Wittenby.

BEFORE he won distinction as naturalist in the third Mount Everest Expedition, Dr. Kingston had already earned the reputation of a careful and industrious observer of wild life in India. In *A Naturalist in Himalaya* (published in 1920) he describes in detail the observations, mostly of insects, made during a period of two years spent in one of the less known regions of British India. The district of Hazara is a narrow territory lying between Kashmir and the Indus, bounded on the S. by the plains of the Punjab and merging in the N. into the high mountains of Western Kashmir. In its diversity of natural features, its wide range of altitude from a few hundred feet to peaks of 17,000 ft., with the corresponding zones of vegetation, the district forms a sort of compendium of all

essential features of the Himalaya and affords a wide scope for the patient naturalist. Thousands of British officers and civilians have spent their days of leave in the Himalaya in pursuit of the markhor, the sheep of Marco Polo, the snow leopard and other great trophies of the hills. Few have been content to track the digger-wasp to its lair, to open up the drum of the cicada, or to watch the murderous activities of the glow-worm. The excitement and joy of the chase are the same, whether the quarry be tiger or ant-lion.

Dr. Kingston writes as he speaks, fluently and without reserve. Though the book has no special mountaineering interest, there is much in it to hold the interest of mountaineers, who may be presumed to be all lovers of Nature. The last chapter is a simple sketch of the geological history of the region. The book is illustrated with photographs and drawings and is provided with a sketch map.

Gebirgskrieg. Militärwissenschaftliche und Technische Mitteilungen. September-Oktober, 1927. Illustrated. Pp. 497-672. Vienna. 5s. or 3 mk.

THIS is a highly interesting publication, which should appeal, in spite of its technical character, to all mountaineers. As might be expected, the 'mountain war' dealt with is almost entirely on the Italo-Austrian frontier. There is very little about the Carpathian and nothing on the Balkan operations. It begins with 'Tolmein' (Caporetto), the pursuit of the routed army across the Tagliamento to the Piave, followed by 'the First defence of Monte Grappa'; the 'Advance of the 9th "Mountain" Brigade from Colbricon to Fonzaso.' An extraordinarily instructive chapter follows which can be translated 'Attack by the Valleys or by the Heights?' Next comes the 'Storming of the Hohen Schneid, 3241m., in the Ortler group,' which will probably appeal most to the average mountaineer. This operation, a tiny one with regard to the numbers engaged—a mere trench raid—nevertheless required an intensive preparation of many months. Real fighting and its attendant manœuvres are clearly impossible on glaciers. The last operation described is one on the Rumanian-Transylvanian front, the 'Defence of the Höhe Magura Casinului.'

The remainder of the work is devoted to mountain artillery, fortification, mountain pioneer battalions, machine guns in the mountains, history of 'mountain' troop formations, including the organization and composition of the famous (German) Alpine Corps, the employment of Tanks in mountains [were these ever *really* employed?], aircraft in the mountains, etc.

In these pages, admirably illustrated and with numerous maps and plans, nearly every phase of the most difficult forms of fighting is clearly and concisely described. There is a pleasant lack of bitterness and of the partisan spirit. The student of Suvoroff's Alpine campaigns will find a strong contrast with modern methods. These latter appear to display the remarkable ponderousness and

want of mobility so characteristic of the Isonzo-Trentino fighting, apart from the two great Austro-German attacks.

We should have liked a study of the Franco-Serb assault on the Dobropolje-Sokol heights, followed by another on the immortal Serb pursuit from the Moglenitza to Belgrade. Voivode Michitch, like Suvoroff, understood true mobility and mountain warfare !

Guide de la Chaîne du Mont Blanc. 3rd edit., with 50 illustrations. By Louis Kurz. Revised by Marcel Kurz. Payot, Neuchâtel, 1927. Price 12 fcs.

THE first edition of this useful guide was published in 1892, and was welcomed as the first of its kind to the finest group in the Alps. The second appeared in 1914, and the present book contains nearly half as much more information and many more route-marked sketches, all re-drawn, without which guide-books are tedious reading. At the present time it is the only recent work of its kind to cover the whole group. It does not profess to give the vast amount of interesting detail presented in the volumes of the well-known Vallot guides, but the information is concise and to the point. It is apparently brought up to 1925.

The book commences with a voluminous bibliography of the group ; then follows a list, up to date, of the huts with the approaches carefully described.

The Swiss portion of the chain is treated in great detail, as might be expected in a Swiss book. The Massif du Trient, dear to the Genevois, is neglected by our people, although it offers problems very suitable to the early days of a campaign.

In the Massif du Tour Noir it might be pointed out that the Aig. d'Argentièrre can be equally well ascended from the couloir at the head of the Glacier du Chardonnet by taking to the arête on the right (ascending) instead of as shown on page 88.

Mr. Oliver's passage of the Col du Tour Noir in 1926, when the time was very considerably reduced ('A.J.' 38), should be noted.

The Mont Dolent comes in for elaborate treatment, M. Marcel Kurz having taken it in charge years ago in his monograph in the *Echo des Alpes*.

It is not correct to state that Mr. Whympster descended *d'un bout d l'autre par le couloir du Col du Mont Dolent*—as frequent use was made of the rocks of the right proper bank.

The interest increases when one reaches the massifs de l'Aiguille Verte, des Grandes Jorasses and des Aiguilles de Chamonix. MM. de Lépiney and Lagarde showed last year that the formidable Col de l'Aiguille Verte can be crossed in certain conditions in very much shorter time than stated on p. 152.

A sketch of the lines of descent from the Grand Dru to the Brèche of the Petit Dru would be welcome.

The note of the Col des Grandes Jorasses is not clear, nor have I ever seen a clear account. It reads (speaking of the S. side) : '*s'élever jusqu'au pied du col.*' Where is the *pied* ? Actually one ascends right into the couloir which leads to the foot of the narrow,

probably unclimbable ice-filled crack leading to the col itself. One keeps naturally to the right hand or E. side of the couloir close to the bounding wall to avoid possible stonefall. This bounding wall can be ascended at several places—old rope rings will be observed—or one can ascend to within 20 metres of the actual foot of the above narrow crack and then climb the E. bounding wall. It is nowhere easy. From the top of this one is never very far away from, although not in sight of, the narrow crack, and one bears again N. to the col, climbing *en route* a difficult slab in a crack of which is a wooden plug. The descent on the same side is readily made by the use of a doubled rope, and no stones were observed to fall on our descent. Snow and ice on this route may much extend the time.

The Hirondelles arête of the Jorasses is said to have been climbed this summer, but with assistance from above. Particulars have not been published.

The magnificent Rochefort arête seems, of recent years, to be coming into its own.

I do not agree with the sketch route up the N. face of the Géant (p. 208), nor do I follow the description.

Generally speaking, on the N. face one can keep all the way quite close to the left-hand arête—holds magnificent—until one reaches a fairly horizontal *vire* usually carrying some ice. One turns right-handed and follows this for about 30 metres until a broad and easy rock couloir leads to the gap between the two summits. This N. face is really easier than the original Sella-Maquignaz route—the rock is superb.

In route 689 the useful traverse across the face of the Grand Gendarme saving the big *rappel* is not given (*La Montagne*, 1925, p. 335).

I would not call route 740 by the Rochers Rouges dangerous. It is much shorter, especially on the descent—crampons are needed. I am glad to see Brenva route 759 condemned. This year a party wisely choosing the Moore route saw a big avalanche sweep route 759.

The book is sound throughout. M. Marcel Kurz states that he had the advantage of using his father's very careful notes of expeditions made since the 2nd edition.

It can only be improved :

(1) By purchasing it.

(2) By sending to M. Kurz, who will not be hurt, a careful note of any inaccuracies in old, and of any new, routes. The illustrations are good. The weight might have been less and each section should have been complete in itself, so as to be detachable.

J. P. FARRAR.

Carte de la Chaîne du Mont Blanc, 1 : 50,000. Par E. Gaillard. 25 francs.

IN issuing this popular map, which the general public will find useful, the Commandant represents the massif as it appears seen from the Brévent. The topography is brought out in a striking manner by

means of ten superposed colours, and the nomenclature is very complete and up to date, following the orthography based on the rules adopted, on the proposition of the author, by the Service Géog. de l'Armée.

The orientation is oblique like the B.I.K. map, *i.e.* the top of the map is not the N.

From a mountaineer's point of view this oblique orientation is objectionable, as many of us who have had to refer to a map in bad weather will know.

Contour lines are absent, but its clear, bold design, which does not pretend to supply close topographical details, will commend the map to the majority of visitors to the finest group of mountains in Europe.

J. P. F.

Through Tibet to Everest. By Captain J. B. L. Noel. Pp. 298. Illustrated. Arnold & Co. London, 1927. Price 10s. 6d.

THERE are three official volumes on the story of Mount Everest. These large, well-illustrated and well-written books have been admirably compressed into a single volume—*The Epic of Everest*—by Sir Francis Younghusband. The purpose filled by the book under review is difficult to describe. For the sum of three shillings more than Sir F. Younghusband's book, the reader is provided with a chatty narrative, some extremely indifferent illustrations, and no map.

Captain Noel, official photographer to the 1922 expedition and a semi-official, cinematographic free-lance in 1924, is a traveller who, modestly, lays no claim to be a mountaineer. If he had been content to terminate his volume with the end of Part I we could have given him a modicum of praise, especially as no account of Captain Noel's solitary wanderings in Tibet has appeared, except in the *Geographical Journal*, we believe.

The book claims to be written from 'the human point of view.' If so, humanity must be in a sad state. The descriptions of the members of the Expeditions are neither sympathetic nor in good taste, the conversations between them savour of the 'titles' of an American film, and George Mallory, who, with Somervell and Finch, is the central figure in the drama, never uttered, although he may have written, the remarks attributed to him. There was infinite attraction in all that Mallory did; there was never anything theatrical in what he said, least of all in his three Odysseys to the Himalaya. The portrait on p. 214, stated to be that of Mallory, is one of the grossest caricatures in modern 'art.' The 'last letter,' illustrated on the same page, is interesting because there are two others in the Alpine Club, both addressed to Odell. The picture facing p. 268 represents no mountain in the world.

Few of us can appreciate a chapter entitled 'Combat! Achievement! Repulse!' This is hardly fit even for the screen and is on a

par with the 'sob-stuff' names, coined, we believe, at the Scala, of 'Snow Field' Camp, 'Frozen Lake' Camp, 'Ice Cliff' Camp, 'Citadel,' 'Eagles' Nest,' 'Windy Ridge' Camp. The camps on the mountain are known to the members of the Expeditions—and to the world—solely by numbers, 1 to 6, starting from above the Base. If names had been given they would have been Tibetan.

There are many careless inaccuracies. The guides who accompanied the Abruzzi Expedition were the Brocherel brothers and Petigax; the 'error' of Mallory in 1921 in not visiting the outlet of the E. Rongbuk Glacier did not cause the loss of a day, hardly of an hour, to the 1922 party; the explorers of that glacier did *not* sleep out in the open, neither did they exhaust themselves and their porters; the Christian name of Strutt is not 'Frank'; there is no such person as Lord Salvesson, and 'Gurkha' is invariably misspelt. The idea of remaining in Tibet and of making an attempt on the mountain after the monsoon was never entertained by the Leaders on the spot. The question of sending a relief party from England in the autumn of 1922 was given up as impracticable. The porters were *not* Darjeeling 'bazaar coolies,' they were hill-men who came from great distances specially to compete in General Bruce's exhaustive selection; the idea of recruiting more efficient porters on the way through Tibet is simply absurd. There are no superiors—probably no equals—to the gallant 'coolies' of the three Mount Everest Expeditions.

Captain Noel was a good organizer for his part in the Expeditions. We turn to the appendix for his suggestions. Here are some of them:

(A) 'Collect an Olympic team of fine young men who represent the manhood of the world and send them equipped with modern scientific appliances and devices. Let them not attack nor assault Everest, but let them *walk up*¹ the mountain and prove its conquest without loss, injury or suffering to themselves. It would be a victory for modern man. . . . I am positive it could be done with correct organization and method.'

(B) Construct 'weather-proof huts' and have the Base installed at No. 1 Camp; construct ply-wood huts and mount them at No. 4 [23,200 ft.].

(C) Build a yak road to No. 1.

(D) Have nothing but animal transport from the Base to No. 3 Camp [21,000 ft.]; in other words, train yaks to march over ice, séracs and, finally, crevassed névé.

(E) Provide a *Téléférique* from No. 3 to No. 4 Camp [North Col] to carry stores of 50 lbs. weight.

(F) Install W.T. stations to connect with India and the various camps [the one reasonable suggestion and a plan which, together with telephones, might have been adopted in 1924].

¹ *Italics* in the text.

(G) Provide a 'white man cook' for the Expedition.

Shades of Daudet and Albert Smith!

The book is written to 'popularize' the Chomolungma range. This is, perhaps, as worthy a motive as a film (the taking of which is described on pp. 245-7) purporting to represent the deathless rescue of the marooned porters. This, as shown in London, took place in brilliant weather, or so it appeared to the audience. But, for ourselves, we have no use for gallery-play, nor for a cinema, nor for 'special pictorial postage stamps' on the Throne of the Himalaya.

The scandalous episode of the Lamas brought to England in connection with the film, and with which the Expedition and the Mount Everest Committee were absolutely unconnected, is, we understand, largely responsible for present relations with Lhasa. It is mere justice to remember that the sale of the film rights to Captain Noel relieved the guarantors of the 1924 expedition from all liability. We can only regret that he has failed to realize his own liabilities as regards both the book and the film.

The *envoi* is in keeping with the rest. 'Will Everest be climbed? Of course it will. Why, some day man will fly to the top of Everest and walk down breathing liquid oxygen gas. The world is owned by man. Man has infinite capacity within himself.'

Absit omen.

Switzerland Calling. By E. W. Jackson. London, 1927.

FRESHLY and pleasantly written and original in being the first book of its kind, a climbing book by a young climber. Considerable powers of observation are evident, and the writing is easy. The title is certainly up to date, being taken from wireless. There is youthful freshness in the remark on the Morteratsch climb, 'There was a divine chimney which was splendid fun scrambling up,' and there is wisdom in a later remark, 'All these things seem trivial, but the big things only come seldom.' And finally the true spirit of mountaineering comes out, 'You will understand why I dream and dream again of the glorious mountains.' All most excellent for seventeen.

Caravans and Cannibals. By Mary H. Bradley. London, 1927.

THIS volume is a record of a tour round Ruwenzori. Writers of papers on travel or mountaineering who read this work will get valuable suggestions as to method. Avoiding all endeavour to teach facts, the authoress takes the reader with her on the journey and by the ease and the detailed interest she feels in men, animals and scenery—expressed in just the right words—enables him to see and to feel more than he would have done had he himself taken the trip. This absence of the guide-book style and of the informative teacher is rare in modern works of travel. Early papers in this JOURNAL and elsewhere owe the pleasure they give the reader largely to a similar quality of well-informed simple directness in the writing.

THE ALPINE CLUB LIBRARY.

The following additions have been made to the Library:—

Club Publications.

- Appalachian Mountain Club.** Register for 1927. $7\frac{1}{2} \times 5\frac{1}{2}$: pp. 131.
C.A.F. Isère. Circulaire trimestrielle. 2me année, no. 3. $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 12. Avril 1927
C.A.I. Napoll. Bollettino mensile. Anni 5 e 6. $9\frac{1}{2} \times 6\frac{1}{4}$. 1926-7
— Staz. Univers. Monti d'Italia, Val Masino. 15 Cartoline. 1926
— Torino. Annuario 1926. 10×7 : pp. 117.
 History of Soc. alp. ragazzi ital., Gruppo femm. d. Sezione, C.A. Accademico ital.
D.u.Os.A.-V. Kassel. Festschrift zur Feier ihres 40 jährigen Bestehens. $10\frac{1}{2} \times 7\frac{1}{2}$: pp. 41: plates. 1926
Deutscher Gebirgsvereln. Jahrbuch. 37. Jahrgang. 9×6 : pp. 203: ill. 1927
Harvard Mountaineering Club. Harvard mountaineering. Vol. 1, No. 1. 9×6 : pp. 32: plates. Cambridge, Mass., 1927
 The Club was founded in 1924. Active membership is limited to those who have had some real mountaineering experience.
 Contains: Mt. Clearwater: Mt. Moran and Tetons: Lyell Pks and Mt. Forbes: Dolomite climbing.
Den Norske Turistforenings Arbok. $9\frac{1}{2} \times 6\frac{1}{2}$: pp. 258: plates. 1927
 Contains: 50-ausdagen fro St. Skagaselstinds førstebestigning.
 — Handbok. $6\frac{1}{2} \times 5\frac{1}{2}$: pp. 81. 1927
S.A.C. Taschen-Kalender 1927. XX. Jahrgang. 6×4 : pp. (xii), 32: plates.
 — Basel. Jahresbericht für 1926. 9×6 : pp. 74: portraits.
 Portraits of Emil Burckhardt, Hans Grass and Peter Egger: In mem. Dr. Emil Burckhardt.
 — Uto. Der Uto, Nachrichten. 5. Jahrgang. 9×6 : ill. 1927
Ski-Club of Great Britain. Ski Notes and Queries. Vol. 3, no. 32. $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 235-80: plates. May 1927

New Books.

- Allen, W. E. D.** New political boundaries of the Caucasus. In Geogr. Journ., London, vol. 69, no. 5. $9\frac{1}{2} \times 6\frac{1}{2}$: pp. 430-41: map. May 1927
De Amicis, Ugo. Alpe mistica. $7\frac{1}{2} \times 5$: pp. 311. Milano, Trèves, 1926. L. 10
 Page 243:

' Bisogna fissare lo sguardo in alto, a lungo e con buona volontà; a lungo e con tutto l'affetto del tuo cuore; allora soltanto potrai leggere quella parola, speranza. E bisogna riuscire a leggerla! Perché, se non la leggi di lassù, dalla cima di una montagna in una giornata serena, ben difficilmente la potrai leggere ancora quando srai sceso al piano.'

- Armandy, André.** Terre de Suspicion. Roman d'aventures. Paris, Tallandier, 1926
Bollettino del Comitato glaciologico italiano. N. 7. 10×7 : pp. 166: ill. Torino, 1927
 U. Monterin, Variazioni dei ghiacciai italiani, 1925-6: A. Roccatis, I ghiacciai delle alpi marittime orientali, 1921-4: F. Sacco, Gruppo d. Monviso: G. Nangeroni, Valtournanche: U. Monterin, Osservatorio del Col d'Olen.
Bordeaux, Henri. Les Jeux dangereux. $7\frac{1}{2} \times 4\frac{1}{2}$: pp. 287. Paris, Plon, 1926
 Sports d'hiver, Villa d. Neiges, Feu à Mürren, Courses de Mürren, etc.

- Bradley, Mary H.** Caravans and Cannibals. A hunting trip round Ruwenzori.
London, 1927

Page 25: 'A few moments later we saw [from near Portal]—off to the left—a great mountain range against the sky, the tops veiled in cloud.

'Sir Samuel Baker was the first European to see the Ruwenzori; he and his wife saw "the blue mountains to the south" during his exploration of Lake Albert in 1864, but it was not until 20 years later, when Stanley came, that the high snows were discovered, and for 20 years after that they remained as unknown and mysterious as ever—cold, untrodden heights glittering under a tropic sun.'

Page 95: '[near Bungulu] We had a magnificent view of the Ruwenzori mountains above the nearer hills. We could see the entire range, fifty miles long, with soaring peaks, where the glittering snow lay softly as a cloud against the burning sky. Night and morning those high peaks stood out in crystal clearness and the sunset that burned behind us threw magic colour over the serrated sides and changing drifts. It was a marvellous country. East and south the Ruwenzori and below us a dark sea of equatorial forest stretching on and on, with here and there the vivid green of a meadow.'

- Bruère, P.** La métaldéhyde comprimée ou charbon blanc. In Ann. d. falsifications, Paris, no. 206. $9\frac{1}{2} \times 6\frac{1}{4}$: pp. 70-3. Février 1926

See note under R. Villers.

- Buxton, Harold.** Trans-Caucasia. $7 \times 4\frac{1}{2}$: pp. x, 99: ill. London, Faith Press (1926). 3s.

A short history and account of present conditions.

- Cadisch, Jos.** Der Bau der Schweizeralpen. $9\frac{1}{2} \times 6\frac{1}{2}$: pp. 61: ill. Zürich, Orell Füssli, 1926

- Carr, Herbert R. C.** A climbers' guide to Snowdon and the Beddgelert district. Issued by the Climbers' Club. $6 \times 4\frac{1}{2}$: pp. 143: plates, map. London, Burrup, 1926

- Chamonix.** Musée de Chamonix. Catalogue Descriptif illustré. $6\frac{1}{2} \times 4\frac{1}{2}$: pp. 57: ill. (Loches, Daigremont, 1927)

Pp. 27-37, Objets relatifs à l'histoire de l'alpinisme.

- Cooper, Courtney Ryley.** High country. The Rockies yesterday and to-day. $8\frac{1}{2} \times 5$: pp. x, 294: plates. Boston, Little Brown & Co., 1926

An account of former mining life and to-day's motor camps.

- Coste, Jean.** Mes quatre premières années de montagne. Préface de Paul Helbronner. $7\frac{1}{2} \times 5\frac{1}{2}$: pp. v, 167. Paris, Ficker, 1927

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Travels in Sikkim with descriptions of art, religion, etc.
- Gardner, Arthur.** The art and sport of alpine photography. 8½ × 5½: pp. xvi, 224: 150 plates. London, Witherby, 1927. 21s.
- Gos, François.** Rambles in High Savoy. 9½ × 6½: pp. 169: plates. London, Longmans, Green, 1927
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- Henry, Abbé.** Alpinisme. 6½ × 4½: pp. 70: ill. Editions 'Augusta Praetoria,' Aoste, 1925
- Hingston, R. W. G.** A naturalist in Himalaya. 8½ × 5½: pp. xii, 300: plates. London, Witherby, 1920
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- Humphreys, G. N.** New routes on Ruwenzori. In Geogr. Journ., London, vol. 69, no. 6. 9½ × 6½: pp. 516–31: ill. June 1927
- Jackson, Eileen Montague** ('Miss Tarzan'). Switzerland calling. A true tale of a boy and girl's wonderful summer holidays climbing in the Alps. 8½ × 5½: pp. (v), 238: plates. London, Black, 1927. 5s.
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- Kober, Leopold.** Ueber Bau und Entstehung der Alpen. In Forschungen u. Fortschritte, Berlin. 11½ × 8½: pp. 155. 1. Okt. 1926
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- Loewe, Fritz.** Der Hand der bergsteigerischen Erschliessung der aussereuropäischen Gebirge. 11½ × 9: pp. 9. Berlin, 1927
A bibliography arranged geographically.
- Macgregor, Alasdair Alpin.** Over the Sea to Skye, or Ramblings in an Elfin Isle. 7½ × 5: pp. xxiv, 353: plates. London, Chambers, [1926]
- Mettrier, Henri.** La torrentialité dans la Vallée de Peisey. Ex Bull. Sect. de géogr. 9½ × 6½: pp. 54. Paris, Imprim. nat. 1925
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Vol. i. p. 228, letter to Frederic Harrison:

'December 15, 1872. On a Sunday afternoon. Never was a landscape so grey and detestable, and it is made worse by the accident that I am writing about on the Isle of St. Peter in the Lake of Biennne, where I had a glorious day last July. I notice this by the way, that Rousseau omits to mention the fact that from the island you have a most superb view of the mountains of the Bernese Oberland, or at least dismisses them in two words, "montagnes bleuâtres": yet there is not one of your pedants of the Alpine Club—from the sensible and social and civic you, and the cynical anti-enthusiastic Stephen—who would not have revelled in giving us a string of uncouth names, heights, ascents, and only the god of mountain, cloud, and human pedantry knows what besides. Yet Rousseau really loved nature, while the Alpine Club takes her as a pick-me-up after the exhausting imbecilities of the London season; or as a concentrated tonic, bearing them up against the future fatigue of writing articles for the "Saturday," or scraping up guineas in Lincoln's Inn. Oh, how I despise Alpine Cant.'

- Mundy, Talbot.** Ramsden. $7\frac{1}{2} \times 5$: pp. 287. London, Hutchinson (1926)
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- Niebel, Franz.** Das Klettern im Fels. 6. vermehrte Aufl. $8 \times 5\frac{1}{2}$: pp. 195: München, Rother, 1926
ill.
- Die Ostalpen.** Bl. 12, 18. Rosengartenspitze, Kl. Zinne.
- Pereira, George.** Peking to Lhasa . . . compiled by Sir Francis Younghusband from notes and diaries supplied by Cecil Pereira. $8\frac{1}{2} \times 5\frac{1}{2}$: pp. x, 287: plates. London, Constable, 1925
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- Purtscheller, Ludwig, und Heinrich Hess.** Der Hochtourist in den Ostalpen. 5. Aufl. von Hanns Barth. 3. Bd. Nördliche Ostalpen von der Salzach bis zum Wiener Becken. 6×4 : pp. 272: maps, ill. Leipzig, Bibl. Instit., 1927
- Pye, David.** George Leigh Mallory. A Memoir. $8 \times 5\frac{1}{2}$: pp. (viii), 183: ports., plates. Oxford University Press, 1927
- Reynolds, J. R.** Iceland in 1872 and 1926. In Geogr. Journ., London, vol. 70, no. 1. 9×6 : pp. 44-50: ill. July 1927
- Sacco, F.** Guglie alpine del Piemonte. Ex Pro Piemonte. $9\frac{1}{2} \times 6\frac{1}{2}$: pp. 12: ill. Torino, Checchini, 1926
- Il glacialismo nel Gruppo del Monviso. Ex Boll. glac. ital. no. 7. $10\frac{1}{2} \times 7$: pp. 58-93: map. 1927
- Il Dente del Gigante. Ex Flore Valdotaïne. $9\frac{1}{2} \times 6\frac{1}{2}$: pp. 10: ill. Aosta, Soc. Edit. vald., 1927
- Specchi alpini. Ex Pro Piemonte. $9\frac{1}{2} \times 6\frac{1}{2}$: pp. 10: ill. Luglio—Dicembre, 1926
- Il glacialismo nella Valle d'Aosta. Ufficio idrografico del Po, Parma. 10×7 : pp. 67: map. Torino, Checchini, 1927
- Schmieder, Oscar.** The east Bolivian Andes, south of the Rio Grande or Guapay. Univers. of California Publications in Geography, vol. 2, no. 5. 11×7 : pp. 85-165: map, plates. Berkeley, 1926
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- Skrine, C. P.** Chinese Central Asia. $8\frac{1}{2} \times 5\frac{1}{2}$: pp. xvi, 306: map, plates. London, Methuen, 1926
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- Schweizerischer Kalender für Bergsteiger und Skifahrer, 1927. $6\frac{1}{2} \times 4$: pp. 240. Bern, Stämpfli, 1927
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Bd. 1, Hermann v. Barth, pp. 79.
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- Jahn, Gustav.** Frühling auf der Rax. A large coloured picture, 22×30 , printed by Angerer and Göschl, Wien.
- Map.** Carte géologique du massif du Mont-Blanc à l'échelle du 1/20.000^e par MM. Paul Corbin et Nicolas Oulianoff. Feuille Servoz—Les Houches. Notice explicative. $8\frac{1}{2} \times 5\frac{1}{2}$: pp. 26. Paris, Barrère, 1927
- Carte géologique du Mont-Blanc (partie française) à l'échelle du 20.000^e, par MM. Paul Corbin et Nicolas Oulianoff. Paris, Institut cartographique, 1927
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CORRESPONDENCE.

A DEFENCE OF SKI-RUNNERS.

To the Editor of the ALPINE JOURNAL.

SIR,—The article on Alpine accidents in the last issue of the ALPINE JOURNAL contains some severe strictures on British ski-runners. These criticisms might safely be ignored had they appeared in any less influential journal. My object in replying in some detail is not controversy, but conversion. I believe that mountaineers and ski-runners have everything to gain by friendly co-operation, and this letter is written in the hope of eliciting a little more sympathy and a little more understanding of our peculiar problems from the heirs to a great tradition.

I must begin with a reply to a purely personal criticism. Your contributor writes as follows :

‘The British and other Ski Clubs issue sensible advice and warnings, but the toll of accidents appears to qualify considerably the statement by a great ski authority that :

“ . . . the ski-runner . . . may claim with justice to be a specialist in one important branch of mountaineering, for he has contributed far more than the foot climber to the science of snow-craft. Snow-craft was, indeed, a rudimentary science until ski-runners began to climb. Guides, like *Christian Almer*,¹ who were credited by their employers with possessing an infallible knowledge of snow conditions, made the most elementary blunders, blunders that a ski-runner who had crossed no pass higher than the Scheidegg would instinctively avoid. . . . Even the most casual of ski-runners interested only in tests and races soon picks up more snow-craft than is within the knowledge of the average mountaineer.”²

‘It is hard to estimate the baneful influence caused by remarks such as these, but, *si monumentum requiris, circumspice*.’

The passage quoted with such disapproval by your contributor is taken from a ‘History of Ski-ing and Winter Mountaineering’ which has been appearing serially in the *British Ski Year Book*. Proofs of this History were sent to an exceptionally large number of distinguished mountaineers, British and Alpine. The remarks quoted by your contributor were not challenged until the *British Ski Year Book* actually appeared. The present Editor of the ALPINE JOURNAL criticized the reference to Almer, and I at once replied that I would omit it when the articles appeared in book

¹ ‘The italics are our own.—A.J.’

² ‘*British Ski Year Book*, 1926, p. 613.’

form. The phrasing of one sentence quoted by the 'A. J.' was needlessly aggressive and I was glad to have my attention drawn to it. I am not attempting to saddle proof-readers with responsibility for my views, and I wish to acknowledge, with all possible sincerity of thanks, the kind and valuable assistance of the late and present Editors of the *ALPINE JOURNAL* in reading the proofs of these particular chapters. Had I not been guided by their criticisms, I should have been better prepared for trouble. It is, however, a little trying to be publicly censured for a passage which one has agreed to withdraw.

But though I was prepared to withdraw this passage, I am not prepared, now that it has been challenged, to admit that it was incorrect. The theme of your contributor is the foolishness of ski-runners. Ski-runners may be foolish, but I have yet to meet a ski-runner who would not instinctively recognize that of all paths, safe in summer, but dangerous in winter, the path to the Bäregg Inn is perhaps the most dangerous. A lecturer on avalanches could not cite a more perfect text-book example to illustrate the classic features of avalanche country. Those who follow this path in winter are not only liable to be overwhelmed by avalanches from above, but they also run a grave risk of starting an avalanche; for the path crosses steep slopes deprived of their natural support and left hanging above a vertical cliff below; of all types of slopes the most dangerous.

On January 20, 1874, Mr. Coolidge, led by Christian Almer, left Grindelwald for the Bergli hut, and followed the ordinary path to the Bäregg.³ The entire party only just missed being overwhelmed by an enormous avalanche composed chiefly 'of snow which had been loosened on the upper portions of the Mettenberg by the previous day's rain.' Directly after arriving at the Bäregg another enormous avalanche fell across the path, 'utterly obliterating our footsteps.' A few years later Mr. Coolidge was actually caught in an avalanche on the path between the Bäregg and the Bänisegg. He 'luckily escaped with the loss of an ice-axe and a pair of spectacles.'⁴ After these three escapes the route via the Bäregg was at last abandoned by Almer in favour of the safe and obvious route on the true left-hand side of the glacier, which has since been invariably followed by winter mountaineers and ski-runners.

As a small boy, I regarded Christian Almer with the reverence which small boys yield to their heroes, and I have lost none of my respect for one of the greatest guides in Alpine history. Christian Almer will always be remembered as the pioneer of winter mountaineering, but like other pioneers he made mistakes. Surely it is not impious to suggest that snow-craft no less than rock-craft has developed since the eighties. Facts are stubborn things, and your contributor cannot dispose of the facts I have mentioned by printing

³ *Alpine Studies*, p. 110.

⁴ *Ibid.* p. 117.

Christian Almer's name in italics. It is easy to imagine the strictures which the ALPINE JOURNAL would pass on a ski-runner who followed Almer's route in winter up to the Bäregg Inn. Nor am I prepared to modify my belief that the average ski-runner picks up more snow-craft than the average mountaineer. I use the words 'average mountaineer' and not 'the average member of the Alpine Club' as I have specifically excluded experts from this comparison.

By an average mountaineer, I mean a man who has climbed for two or three seasons between guides. Such a man will discover that snow is usually hard in the morning and soft in the afternoon. He may once or twice observe that his guides are muttering doubts as to the stability of a particular snow slope. But the chances are that at the end of his third season he will know little more about snow than when he began, though his skill on rocks and his balance on ice will probably have improved out of all recognition. The expert, of course, who aspires to lead or at least to influence the decisions of his party must study avalanche conditions in summer, which are fortunately far less complex than avalanche conditions in winter or spring.

Now consider the ski-runner. He spends his first few days on the practice slopes, then starts forth for his first small run. Before he has been ski-ing for many minutes he will discover that the snow, which to his untrained eye appears a uniform monotonous surface, is full of treacherous surprises. He runs from powder snow into breakable crust and pitches violently on to his head, from powder snow into unbreakable crust and sits down heavily on his tail. If he wishes to maintain an approximately vertical, rather than an intermittently horizontal position, he is forced to study the ever-changing humours of the snow. He is impressed from the first not only by the importance of avoiding falls but also by the danger of avalanches. The ski-runner is indeed haunted by the avalanche menace, and it is this constant pre-occupation which is responsible for the comparatively small number of fatal accidents.

Few people bother their heads with useless knowledge. Why should the mountaineer concern himself with all those subtle changes in speed and texture which are meaningless to the man on foot, but full of significance to the man on ski. Is it surprising that the ski-runner, alone, should have mastered the gamut of snow values due to the intricate interplay of sun, wind and storm? 'The ski-runner,' writes Dr. Jenny, 'must know more about snow than the summer mountaineer.' Dr. Jenny, the Editor of the *Swiss Alpine Club Journal*, is certainly no bigoted partisan of the ski-runner, but he realizes that snow-craft is the especial domain of the ski mountaineer. The reader who doubts the complexity of snow-craft as studied by the ski-runner could do worse than glance through the examination paper on snow-craft which is printed in the current issue of the *British Ski Year Book*. We ski-runners are proud of our contribution to the great science of mountain-craft. Since

ski-ing was introduced into Central Europe, very little has been written about avalanches excepting by ski-runners. Our present knowledge about avalanches is due in the main to ski-runners such as Paulcke, Hoek, Bilgeri, Rickmers and Marcel Kurz. Among our own people, the study of winter and spring snow conditions has been the work of ski-runners.

Surely the Alpine Club should be the first to give credit where credit is due, and to recognize in no ungenerous spirit the contribution which the ski-runner has made to the sum-total of our mountaineering knowledge.

I have tried to justify the remarks quoted by your contributor not because I am unduly sensitive to criticism, but because a larger issue is involved. I should not have replied to a purely personal criticism lest I might appear ungrateful to the *ALPINE JOURNAL* which has always reviewed my books with great kindness, and which paid a signal compliment to that last issue of the *British Ski Year Book*, and indeed, to the very article which is now the subject of censure.

I do not think I am mistaken in assuming that the reference to sports known as 'Slaloms' in your last issue indicates a certain contempt for the ski race in general and the Slalom in particular. Let me quote the relevant passage :

'British expert ski-runners mostly spend their time in sports known as "slaloms" while the non-experts slide about on slopes, trodden to adamantine hardness, at the back of hotels. Yet both kinds often start for an expedition immediately after or during a fall of fresh snow. . . . Many more accidents may occur before these young skiers learn the rudiments of winter mountaineering. The pioneers waited for days, even weeks, before the conditions appeared safe ; these later-day "experts" wait hours, sometimes not even that.'

First as to Slaloms. Your contributor is misinformed. It is only a minority of British experts who race, and even this minority does not concentrate on the Slalom. The downhill race still holds its pride of place ; for there are three downhill races to every Slalom race.

What is a Slalom race ? It is a race down a course defined by flags which are placed so as to test the ski-runner's mastery of the turns. The Slalom is a fine test of control, and, as such, might be expected to appeal to the mountaineer. The man who has been through the Slalom school is a safer companion when ski-ing on a rope than the man who has concentrated exclusively on high speed. The modern Slalom has been developed by the British. The Swiss Universities Ski Club honoured us by adopting our Slalom rules and by awarding their Championship, as we do, on the combined result of a downhill race and a Slalom race. Our view is that the downhill race is the best test of dash, balance and courage, but that the Slalom is the supreme test of control and technique. We regard

these two races as complementary, and consider that a champion should excel in both. Our view is finding support on the Continent, especially among Swiss, German and Austrian students. Our instructions for setting a Slalom course have been reprinted in Canadian and American ski-ing journals, with the result that Slalom races have been successfully held on the American continent. This appears to me to be a legitimate matter for congratulation.

British ski-runners hope to be represented in future at the Winter Olympic Games. If we compete, we may as well not disgrace ourselves, and if we hope for success some of our young men must specialize in racing. Handicapped as we are by small numbers and lack of opportunity, we may well be proud of the modest successes that we have so far secured in international ski-ing competitions. At a time when other countries are beating us in games which we taught them to play, it is a matter for legitimate satisfaction that in ski-ing, to us an alien sport, we are beginning to hold our own. The British Universities Team beat the Swiss Universities Team in 1926, and our representatives also did extremely well in the International Universities Meeting at St. Moritz and Wengen. Mountaineers who never ski will, I am sure, feel a certain satisfaction in the successes of those who are their own countrymen.

I do not write as a racer, for I have neither the courage nor the skill to excel in racing. My own primary interest is in ski mountaineering; but I do not feel it essential to belittle one form of sport because I happen to prefer another form, and I confess my unstinted admiration for those who have proved their mastery in a virile and exacting branch of ski-ing.

According to your contributor, British experts mostly confine themselves to Slaloms, and the non-experts to playing about on the practice slopes.

I refer your contributor to the back numbers of the *British Ski Year Book*; for I do not propose to waste space in dealing with this wild travesty of the facts as far as Slaloms and practice slopes are concerned. Indeed, your contributor tacitly admits his inconsistency when he condemns ski-runners for leaving the practice slopes too soon, and for invading too rashly the preserves of the mountaineer. The gravamen of his charge is, indeed, that ski-runners enter the danger zone without due experience, due preparation, and without expert leadership. This charge is worth meeting. The other charge is not.

I admit, of course, that the danger zone is far lower in winter than in summer. The Faulhorn is often as dangerous in January as Mont Blanc in July. Mountain-craft indeed begins in winter when one puts on ski. British ski-runners seldom employ guides except on the glaciers, and might therefore be described as guideless mountaineers, if we admit, as we must, the contention that small mountains in winter call for mountain-craft. If your contributor is correct, and if British ski-runners are as ignorant and as reckless

as he suggests, we should expect a heavy death roll. Conversely, if accidents are rare, the British ski-runner must be credited with more knowledge and more judgment and more prudence than your contributor is willing to allow him.

I confine myself to British ski-runners because I possess our own accident statistics up to date, and also because the *ALPINE JOURNAL* in the main confines its attack to British ski-runners.

Of course, if a ski-runner employs a professional guide, the responsibility of an accident rests with the guide. Cases in which guided ski-runners have been killed cannot be cited to sustain the charge that the ski-runner is an amiable idiot who rushes into danger unaccompanied by experienced leaders. This thesis can only be maintained by the evidence of accidents in which ski-runners are unaccompanied by guides; for by hypothesis the guide is an experienced mountaineer.

British ski-ing dates back to the nineties. The aggregate membership of the British ski clubs at the present moment is not far short of 4000. A complete list of all British ski-ing accidents is published in the current issue of the *British Ski Year Book*. I know of only eight fatal accidents in which British ski-runners have been the victims, eight accidents involving a total of 13 deaths. Of these, one occurred in a race, one was due to a fall on a hidden rock while practising for a race, and one was due to suffocation following heart failure on the practice slopes. Only five of these accidents have any real bearing on the point at issue. Of these five accidents, three were due to mistakes by professional guides. Again, in the case of the Valluga accident, British runners were following a professional instructor and a local man, who could reasonably have been expected to understand local conditions. The Valluga accident can therefore hardly be quoted in support of the theory that British ski-runners run into danger without expert advice. I know of one case, and of *one* case only, of a fatal accident to a party composed entirely of amateur British ski-runners.

This is a record of which we have every reason to be proud, a record which compares very favourably with that of summer mountaineers, and which is quite inconsistent with the thesis advanced by your contributor.

I attribute our low death roll to various causes. From the nature of his sport the ski-runner is compelled to devote far more attention to snow-craft than the average mountaineer. Again, few ski-runners employ guides for small expeditions; but even small expeditions can be dangerous, and the man who is thrown on his own resources is forced to study snow more accurately than the man who climbs with guides. Finally, ski-runners are far more interested in the theory of snow-craft than your contributor assumes. The sale of a small book devoted entirely to problems of snow-craft has been surprisingly large. In these days people will spend money on anything rather than a book, and this fact therefore speaks for

itself as evidence of a wide-spread interest in snow, its perils and problems.

The sentences which your contributor quoted with so much disapproval from my own article are calculated to convey a false impression when divorced from their context. I was writing as a historian, and a historian is less concerned to awaken a conviction of sin than to record the facts. The 'baneful influence' of the remarks which your contributor quoted—baneful, I suppose, because flattering—are more than counteracted by the attempts which the present writer and many others have made for many years to impress on British ski-runners the need for long, patient and consistent study of a difficult science—snow-craft in winter and in spring.

If you contrast what the Alpine Club and the British Ski Clubs have done to promote a better knowledge of the mountains in winter and in spring, you would, I think, admit that the British Ski Clubs at least have not been idle. The Alpine Ski Club published the first Ski Guide to any part of the Swiss Alps, and two volumes of that Ski Guide to the Bernese Oberland have been issued. The first ski map to the Bernese Oberland was the joint production of an English and a Swiss member of the Alpine Ski Club. This map was distributed by the Swiss Alpine Club to all their members. The first book dealing systematically with snow-craft in spring and in winter was the work of an English member of the Alpine Ski Club. This book in its earlier form has been translated into German and its later form into French. The author was elected an honorary member of the G.H.M., a great compliment to British ski-ing.

Every issue of the *British Ski Year Book* contains articles on snow-craft or avalanches. A recent issue of *Ski Notes and Queries* contains an examination on snow-craft, and prizes have been offered by the Ski Club of Great Britain for the best answers.

The Club sent a special Commission to investigate the accident on the Valluga and the Report appears in the present issue of the Year Book.

The Club issues frequent warnings about avalanches and other dangers of the winter Alps.

There are, of course, foolish ski-runners, just as there are foolish mountaineers. Expert ski-runners sometimes make mistakes, and it would not be difficult to prove from the pages of the *ALPINE JOURNAL* that expert mountaineers are not always infallible. But surely ski-runners should be left to censure ski-runners. ἔρδοι τις ἢν ἔκαστος εἰδείη τέχνην.

The British Ski Clubs are not unmindful of their responsibilities and are determined to do all in their power to build up a sane tradition of caution in the winter Alps. Surely the courteous relations which are customary between the adherents of all other sports should also characterize the exchange of views between mountaineers and ski-runners, linked together as they are by their common love for the hills.

Ski-runners are ever ready to admire those who have made Alpine history, and I was grateful for the generous tribute in the *ALPINE JOURNAL* to 'the qualities of quick decision, determination and courage demanded of the ski-runners over unknown ground.'

'We cannot,' writes another great mountaineer, 'be wholly devoted to one enthusiasm without learning something about the nature of all enthusiasm, and without in the end grounding at least a respect for all objects and pursuits, however originally unsympathetic to us, which arouse a like devotion in others.' This is well said, and I am confident that the enthusiasm of the ski-runner will in time earn the respect of the mountaineer in this country, and that the cleavage between mountaineers and ski-runners, which is unknown abroad, will disappear. Even in England there appear to be some who recognize that the aloof attitude of the Alpine Club in the past is a matter for regret.

I quote from 'A.J.' 37, 409 :—

'Lastly there is an indirect lesson for a small but not negligible group of members of the Alpine Club. Some seem to hold that the Club is not concerned with ski-ing. If they will only read Marcel Kurz's book, they can scarcely fail to see that winter mountaineering is so irretrievably mixed up with ski-ing, that to persist in their present attitude must ultimately lead them to the logical conclusion that the former is also outside the scope of the Club's activities. Kurz mentions the fact that the Swiss Alpine Club fell into the same trap, but has since realized and corrected their errors. May the Alpine Club do likewise.'

It is because I share the hope expressed in this last paragraph that I have wearied the reader with the defence of a sport which I love, but which was not my first love, for I suffered from mountain fever long before I began to ski.

In this country, ski-ing is still a young sport. We have had to contend against great difficulties. We are trying to build up traditions which you have inherited, and we look to the Alpine Club for a sympathetic understanding of our own peculiar problems. I hope that we shall not continue to look in vain.

I am, etc.,

ARNOLD LUNN.

CHALET BERNA, GRINDELWALD,
July 4, 1927.

SIR,—The part of Mr. Lunn's letter which deals with the question of Christian Almer seems to have been written under the apprehension that snowcraft is a subject limited to snow of the particular class which happens to be found in the Alps in winter. As so many skiers look to Mr. Lunn for advice, it is unfortunate that a statement made by him, which might lead them to think they know all that is to be known of a difficult subject, especially difficult in the case of winter snow, should ever have appeared in print. Even if

the ice conditions in 1874 were such that the present alternative route to the Bäregg was feasible at that date, the question as to whether Almer took one route or the other on some particular occasion seems quite irrelevant. In fact it seems unwise to try to substantiate a statement so obviously open to dispute, when its acceptance might give others an undue sense of security.

Mr. Lunn's letter deals with matters quite apart from Almer's skill in snowcraft; and as he seems to indicate the existence of a grievance on the part of British skiers that there is a cleavage between them and British mountaineers, it may be well to try and get an insight into the true relationship between ski-ing and mountaineering. Safe ski-ing necessitates a certain amount of mountaineering knowledge, just as sailing on the Broads necessitates a certain amount of seamanship; but the mountain skill attainable by the skier pure and simple, however skilful he be at ski-ing, is as limited as the seamanship which can be acquired in Norfolk. Ask the expert skier to lead a party over some simple untracked snow walk, Zermatt to Chanrion or across the Pigne d'Arolla, for example, and see how he will shape. Untracked snow would be desirable but not essential. There may be sufficient pitfalls even with tracks ahead. In winter tracks are less easily obliterated. The indelibility of ski tracks tends to prevent a long qualification list of ski-ing expeditions from proving any mountaineering qualification whatsoever. Occasionally it may lead the ignorant into danger; but in the long run it probably accounts for the paucity of ski-ing accidents to which Mr. Lunn refers.

Ascent on ski requires the minimum of skill in ski-ing. Descent requires no more mountaineering knowledge than the ascent. A quite indifferent performer on ski can descend as safely as the most skilful, provided that his mountain sense suffices; except in the quite rare cases in which roped ski-ing has to be resorted to. In spite of this the mountaineer is interested in ski-ing because his ski enable him to approach the mountains in winter and in spring, whether his object be hill wandering or true mountaineering; but he realizes that the latter only starts when he has to leave his ski behind. He understands the utility of ski, but dislikes the undue importance attached to third-class tests, competitions and downhill running. Even the Alpine Ski Club, which was formed 'to promote mountaineering on ski,' is not blameless in this respect. 'The Proposer should submit his own impressions, based on personal observation, of the candidate's ski-ing, his speed, his control, his mastery of the turns, and his powers of endurance.' What about his mountaineering?

Those British skiers who do not regard the hills as 'glorified toboggan runs,' to quote, as Mr. Lunn does, from 'A.J.' 37, need not look in vain to the Alpine Club for the sympathetic understanding which he desires. Apart from other considerations, too many members of the Club are skiers for this to be otherwise. Difficulty,

if any, in this direction must be put down to those who use the hills in a manner which is contrary to the traditions of the Alpine Club, or who claim for ski-ing false values from the mountaineering point of view. My only excuse for writing this letter is the fact that you, Sir, have kindly shown me the one written by Mr. Lunn, in which he has quoted from a note of mine which appeared in 'A.J.' 37. I still adhere to that note, which, taken as a whole, is quite consistent with what I write now.

The skier's attitude towards the mountains controls the mountaineer's attitude towards the skier. If more skiers would only find time to do a little summer climbing their outlook would extend beyond the narrow groove they trace with their ski. Ski-ing would give them greater joy; for they would recognize in every irregularity of the winter snow, which they now regard merely as an impediment to their downhill race, an indication of what really lives beneath. Their regard for the hills would be increased; and, for them at all events, Parsenn—Fideris—up by train would be a thing of the past.

Lastly, Mr. Lunn's reference to the Valluga accident should not be misunderstood. Unless the unguided British party had a distinct understanding with the professional in charge of the party ahead, no responsibility whatever for what happened to them can be placed on his shoulders.

I am, etc.,
P. J. H. UNNA.

[The real point is, as Mr. Unna shows, that the mountaineer only begins 'mountaineering' at the place where ski have to be abandoned. How many great 'Summits' have actually been reached *on* ski?

The three greatest winter expeditions of recent years are unquestionably La Meije, Les Écrins and Monte di Scerscen. In the case of La Meije, ski were worn as far as the foot of the Promontoire; on Les Écrins, as far as the Col des Écrins, reached from the Glacier Blanc; on Monte di Scerscen, as far as the Tschierva hut. In other words, in only one instance were ski worn to within 3000 ft. of the summit. Yet the first two have been described as 'ski ascents'!

It even comes to this: are ski the most suitable aids to serious winter mountaineering? We are told that the vast majority of these instruments now manufactured in Norway and Sweden are exported to America and Canada; yet, on the longest and most terrible 'mountaineering' journey ever made, the ascent of Mount Logan, ski were not employed, not even on the approaches. A full account is given ('A.J.' 33, 260, 262) of the three different 'aids' (ordinary Canadians, Alaskans, and bearpaws). On the authority of Messrs. Hall and MacCarthy it is stated that while all were satisfactory, 'they do not think that the "bearpaw" shoe can be equalled for climbing.'

There has never been any question of unfriendliness, such as Mr. Lunn rather appears to imply, existing between the Alpine Club and British skiers. But, until we perceive these latter, as in Tyrol, setting forth on their ski equipped for mountaineering, nailed boots and ice-axes, we shall fail to take much interest in speed races, third-class tests, slaloms and all the paraphernalia of modern winter pot-hunting. We realize that there are many British skiers to whom these remarks do not apply—men and women who love the mountains for themselves and who find sufficient reward in so doing—just as there are many parts of Switzerland still said to be free from cups or prizes for jazzing. But, because we recognize that, for good or for evil, ski have come to stay, we feel bound to point out the reasons for our lack of enthusiasm in the performances of the majority of skiers.—E. L. S.]

PROCEEDINGS OF THE ALPINE CLUB.

A GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, London, W. 1, on Tuesday, May 3, 1927, at 8.30 P.M., Sir George H. Morse, *President*, in the Chair.

The following candidates were balloted for and elected Members of the Club, namely, Dr. William Sargent Ladd, Mr. Stephen Coleby Morland, Mr. Henry Alwyn Trier, and Col. Roger Cochran Wilson, D.S.O., M.C.

The Regulations for the Winter Dinner were approved *nem. con.*

A vote of thanks was accorded Mr. Sydney Spencer and Mr. R. W. Brant for their work in arranging the Exhibition of Alpine Paintings.

Mr. G. E. HOWARD then read a Paper entitled 'Illusions.' Mr. H. E. M. Stutfield, Mr. D. W. Freshfield, Mr. H. G. Willink, Mr. G. A. Solly, Mr. H. V. Reade, and Mr. R. S. Morrish took part in the subsequent discussion, which was terminated with a cordial vote of thanks to the reader of the Paper.

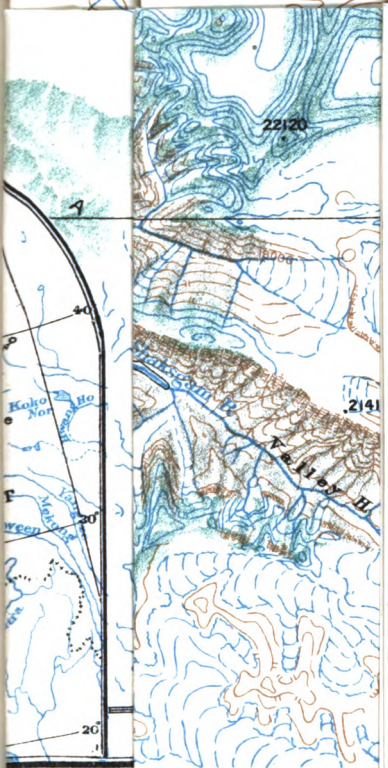
The HONORARY SECRETARY, Mr. Sydney Spencer, afterwards showed some of his slides of the Mont Blanc range and the Dolomites, which were greatly appreciated by those present.

An Exhibition of Alpine Paintings was held in the Hall of the Club, 23 Savile Row, London, W. 1, from Monday, May 2, to Saturday, May 14. There was an attendance of about 150 at the Private View on Monday, May 2. The Exhibition was opened to the public from May 3 to the 14th.

We learn with much regret of the death of Mr. ELIOT HOWARD, one of the senior members of the Alpine Club, to which he was elected in 1867. An obituary will appear in the next number.

CORRIGENDA TO NO. 234.

- P. 22. Illustration. Second Panorama ; *for ' King's Peak ' read ' King Peak . '*
- P. 68, footnote 15, line 2, *after ' in the interest of ' insert ' such ; ' .*
- P. 110, line 22, *for ' sabs ' read ' slabs . '*
- P. 136, footnote 8, line 4, *for ' W . ' read ' E . '*
- P. 140, footnote 11, last line, *for ' Herr ' read ' Frau . '*
- P. 143, line 1, *for ' 3370 ' read ' 3770 . '*
- P. 158, last line, *for second ' 1926 ' read ' 1925 . '*
- P. 160, line 35, *for ' 1926 ' read ' 1927 . '*



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CORRIGENDA TO NO. 235

P. 244, line 5 ; p. 247, line 26 ; *for* ' Marnis ' *read* ' Marius. '

P. 244, line 20, *read* ' agreeable. '

P. 331, paragraph 4, *for* ' St. Christophe-en-Oisams ' *read* ' Oisans. '

P. 362-3. ' A Naturalist in Himalaya, ' *for* ' Kingston ' *read* ' Hingston ' throughout.

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